★ POLITICAL "PAP" – MARKET FACTOR ★

The MAGAZINE of WALL STREET

and BUSINESS ANALYST

MARCH 29, 1958 85 CENTS

SOUND FOREIGN ECONOMIC PROGRAM

Goes to core of our domestic well-being

By James J. Butler & John H. Lind

★

WHAT POLICY ON 1958 DIVIDEND CASUALTIES?

– And other likely candidates

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NO. 2 OF OUR

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By Frederick Ulman

THE TEXAS COMPANY
Reports for 1957

HIGHLIGHTS

FINANCIAL	1957	1956
Net income	$332,303,644	$302,262,620
Net income per share	$5.94	$5.51
Cash dividends paid	$128,906,925	$128,978,474
Cash dividends paid per share	$2.35*	$2.35
Working capital (end of year)	$595,721,833	$598,547,070
Capital expenditures	$389,301,923	$502,613,766
Exploration expenses, including dry holes	$ 92,406,408	$ 87,285,892

**OPERATING • Barrels per day	1957	1956
Gross crude oil produced:		
Western Hemisphere	617,519	577,050
Eastern Hemisphere	435,536	393,295
Total world-wide	1,053,055	970,345
Refinery crude oil runs:		
Western Hemisphere	794,607	726,929
Eastern Hemisphere	268,990	248,945
Total world-wide	1,063,597	975,874
Petroleum product sales:		
Western Hemisphere	735,098	702,490
Eastern Hemisphere	320,510	281,110
Total world-wide	1,055,608	983,600

**In addition, a 2% stock dividend was paid in 1957.*

***These statistics include 100% of the operations of subsidiary companies and the Company's equity interest in the operations of companies owned 50% or less.*

CONSOLIDATED BALANCE SHEET—DECEMBER 31

ASSETS

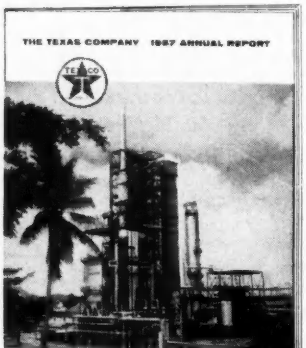
CURRENT ASSETS:	1957	1956
Cash and securities	$ 229,866,336	$ 266,783,841
Accounts and notes receivable	279,599,475	269,212,883
Inventories	374,628,488	312,536,934
Total current assets	$ 884,094,299	$ 848,533,658
INVESTMENTS AND ADVANCES	$ 180,648,163	$ 182,216,486
PROPERTIES, PLANT, AND EQUIPMENT:		
Gross	$3,189,622,656	$2,857,950,714
Less—Depreciation, depletion, and amortization	1,599,537,399	1,422,483,869
Net properties, plant, and equipment	$1,590,085,257	$1,435,466,845
DEFERRED CHARGES	$ 74,266,910	$ 37,912,810
	$2,729,094,629	$2,504,129,799

LIABILITIES AND STOCKHOLDERS' EQUITY

CURRENT LIABILITIES:	1957	1956
Notes, contracts, and accounts payable and accrued liabilities	$ 238,716,827	$ 214,701,923
Estimated income taxes (less Government obligations: 1957—$60,000,000; 1956—$70,000,000)	49,655,639	35,284,665
Total current liabilities	$ 288,372,466	$ 249,986,588
LONG-TERM DEBT	$ 306,739,743	$ 363,855,182
RESERVES	$ 43,141,922	$ 9,589,629
MINORITY INTEREST	$ 37,471,373	$ 30,725,994
STOCKHOLDERS' EQUITY:		
Par value of capital stock issued—shares $25 each	$1,408,887,650	$1,381,262,400
Capital surplus	38,675,350	—
Retained earnings used in the business	605,806,125	468,710,006
Total stockholders' equity	$2,053,369,125	$1,849,972,406
	$2,729,094,629	$2,504,129,799

CONSOLIDATED INCOME STATEMENT

GROSS INCOME:	1957	1956
Sales and services	$2,344,176,856	$2,046,305,092
Dividends, interest, and other income	104,985,554	131,045,562
	$2,449,162,410	$2,177,350,654
DEDUCTIONS:		
Costs, operating, selling, and general expenses	$1,684,072,902	$1,485,605,286
Taxes (other than income)	69,845,086	63,977,198
Dry hole costs	45,428,145	43,145,321
Depreciation, depletion, amortization, and leases surrendered	216,176,860	189,899,810
Interest charges	12,512,084	8,512,730
Provision for income taxes	83,900,000	78,600,000
Minority interest in net income of Canadian subsidiaries	4,923,689	5,347,689
	$2,116,858,766	$1,875,088,034
NET INCOME FOR THE YEAR	$ 332,303,644	$ 302,262,620



A limited number of copies of the Annual Report are available upon request to the Secretary, The Texas Company, 135 East 42nd Street, New York 17, N. Y.

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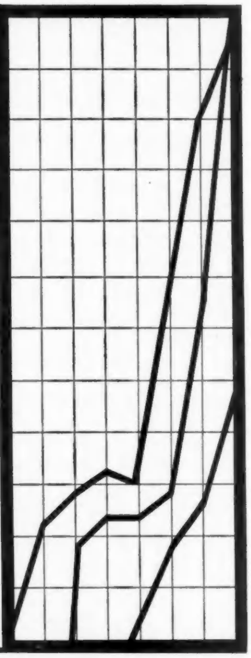
THE OHIO OIL COMPANY

reports one of its

best years in

seventy years of progress

FINANCIAL	1957	1956	How 1957 Ranks in 70 Years
Net Sales and Other Income	$291,982,000	$278,004,000	Highest
Net Income	$ 41,490,000	$ 41,216,000	4th highest
Per Share	$ 3.16	$ 3.14	
Dividends per Share	$ 1.60	$ 1.60	2nd highest
Book Value per Share	$ 27.12	$ 25.56	Highest
Capital Expenditures	$ 64,799,000	$ 52,440,000	Highest
Exploration Expense	$ 25,149,000	$ 24,544,000	Highest
Payrolls	$ 44,256,000	$ 41,800,000	Highest
OPERATING			
Net Crude Oil and Natural Gas Liquids Produced—Barrels per Day	106,625	108,355	2nd highest
Natural Gas Produced and Sold—Thousand Cubic Feet per Day	290,130	282,284	Highest
Crude Oil Transported—Million Barrel-Miles	24,469	25,837	4th highest
Refined Products Transported—Million Barrel-Miles	1,396	1,485	2nd highest
Crude Oil Refined—Barrels per Day	41,521	42,421	3rd highest
Refined Products Sold—Barrels per Day	41,634	41,112	Highest



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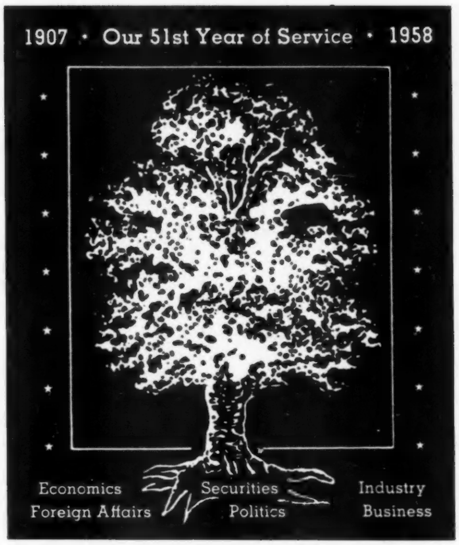
THE MAGAZINE OF WALL STREET
C. G. WYCKOFF, *Editor-Publisher*



The Trend of Events

A GOLD RUBLE? ... Whether a rumor—a "plant"—or merely wishful thinking on the part of gold producers—the recent report of important increases in gold production by the USSR has been followed by the hint that Russia is planning to issue a gold ruble.

Although gold speculators may be behind this rumored report, it is a matter that should be carefully looked into, because such a ruble, with non-resident accounts eventually convertible into gold, would give Russia a major currency propaganda victory of first importance in her destructive economic warfare against the United States.

Regardless of whether it is fact or rumor, we should not ignore the possibility of a gold-backed ruble, but should immediately take the steps necessary *now* to cushion and prevent any shock which would result from Russian initiative in that direction. For, to establish the ruble as a basic currency with the dollar and the pound, at this stage of the recession, could have a most unsettling effect to say the least, and would produce an accelerated sale of American dollars abroad, where already there has been a movement from dollars into gold, as a hedge against any further depreciation of our currency,

Therefore, it is of paramount importance for our legislators to see this threat as a basic step in the economic warfare being waged between ourselves and the USSR, now attacking on all fronts in the hope of thoroughly disorganizing our thinking and our planning.

Our position abroad could be quickly undermined. Europeans in particular, having lived through times of monetary debasement, in some cases more than one, frighten easily, and in troublesome times always turn to gold, which throughout the ages has been the medium into which they have been able to transfer their assets and move them swiftly from one haven to another.

In Germany today gold bars are being offered for sale in the banks, and even wages in many instances are being paid in sheets of gold leaf. If a free gold market should result, that would be something for us to think about. For, in the rise and fall of financial stress and strain, the world has invariably come back to gold, and recognition of this age-old confidence in the metal is now being exploited. Efforts in many epochs and in many lands to substitute other forms of backing for currency, such as commodity dollars and use of various other metals, have (outside of silver) had only temporary success.

Credence is lent to the possibility of a gold ruble by Russian output of gold, which, according to Franz Pick, international monetary expert, reached $595 million in 1957, which gives the Soviets a leading position among world gold producers—and the estimated increase for 1958 to as high as $650 million would put them ahead of South Africa, with a projected output of $625 million.

The potentials are sobering indeed. It is well, therefore, for our legislators to keep this in mind in working out anti-recessionary programs, and to place a moratorium on politics in connection with all efforts made to minimize and correct the depression.

We call the attention of the reader to our Trend Forecaster, which appears as a regular feature of the Business Analyst. This department presents a valuable market analysis of importance to investors and business men. To keep abreast of the forces that may shape tomorrow's markets, don't miss this regular feature.

As I See It!

By CHARLES BENEDICT

LET'S TAKE THE RIGHT ROAD

IT is now clear that the only way to solve the problems of the recession is to approach the matter as objectively as possible, side-tracking the impractical and self-centered viewpoints which seem to be the basis of nearly all the shallow, half-baked schemes that are being suggested today.

It is encouraging to note the President's calmness under fire from the bombardment of panicky suggestions from so many quarters, especially the absurd panaceas that are being advocated by those who have access to the great channels of publicity in this country, and who are winning adherents among those who do not know the answers themselves, and find it easier to accept 'packaged' thinking from any source if it sounds plausible or is advocated by a highly placed individual.

It must be obvious to anyone who has conducted business affairs of one kind or another that the use of expedients merely postpones the day of reckoning —and even the student knows that the artificial stimulant of Benzedrine may keep him "hopped" up through the trying periods of his examinations, but in the end he will be completely exhausted from the toll it has taken on his body.

The hypos given first to the farmers – labor – favorite industrial groups – has only brought demands for more of the same. No one wants to stand on his own feet any longer. Everybody seeks help from Uncle Sam. And who is Uncle Sam—but all the citizens of this country—all the taxpayers. If it were not so dangerous, it would be ludicrous.

The result of the "gimmies" on our treasury has been devastating, and our debt has grown by leaps and bounds as Uncle Sam became the biggest sugar daddy of them all.

Tax Reduction

The demand that taxes be cut is as harebrained as it is futile. Under no circumstances can it bring any advantage to the 6 million or 7 million unemployed, who will have no tax to pay anyhow. And as a fillip to consumer spending, it seems evident that the $40, $50 or $60 "drop-in-the-bucket" tax reduction will accomplish nothing. One has only to read the survey made in January by the Federal Reserve Board in cooperation with the University of Michigan to get the answer. This survey showed that the broad mass of consumers would use their tax savings to pay back debts or to build up their dwindling bank accounts, while the businessmen polled, indicated that they were more interested in applying tax savings to their depleted cash positions rather than spending additional funds for unneeded plants, equipment and inventories.

What is more, the advocates of across-the-board tax cuts shrug off any concern regarding the definite danger to the value of the dollar by the monstrous governmental deficits that would result. For, if Senator Byrd's estimate of a $15 billion deficit in fiscal 1959 (it may even be greater) is accurate, the government debt of well over $300 billion could be reached quickly. This would mean a fixed charge of $10 to $12 billion that would set up an irrevocable tax base for which money must be collected from the taxpayers every year just to pay the interest on the debt. But more than that, such an increase in the debt would produce inflationary pressures that would inevitably depreciate the 50¢ dollar even further—heavily cutting into the value of the savings and assets of all the people.

From the above, it can be seen that the advocates of tax reduction at this time, no matter how highly placed, are either not thinking straight—are badly advised—or blindly believe that their advocacy would give them a political advantage of one kind or another.

Home Building

Next, let's take home building, with the feverish demands on the government to ease provisions and lower money rates for these real estate projects. The same weakness exists here, for certainly the seven million family units that are affected by unemployment are not potential home buyers this year, or even next year. As a matter of fact, with so many family heads out of work, many are likely to have trouble holding on to the homes they own, while others now employed feel their position too precarious to take on the responsibility of buying a new home.

And should the government efforts bog down, the psychological effects would be extremely unsettling and could easily undermine the whole real estate market. This would bring a hurry call to the government for further support on an even broader scale, and throw the mortgage market out of kilter—while the downward spiral in prices would cut existing values for a large number of American home owners.

Public Works

The same unrealistic planning is to be found in public works, which is one of the politicians' favorite panaceas. Such spending is hasty at best and,

at worst, it degenerates intc pure and simple boondoggling, from which the people themselves and the country as a whole would benefit the least. And the resort to deficit financing to carry on this program would put us deeper in the hole and produce inflationary pressures that we may have difficulty in stopping.

But even assuming a well directed public works program were developed, an enormous amount of time would be consumed in getting plans off the drawing board to the blue print stage, and finally into work. Thus projects planned now could take a year or more before they were finalized, and may only get rolling when the need no longer exists—we hope.

But by that time the preliminary costs will have been so enormous that there would be little left for the actual construction planned for. For the increase in the already top-heavy built-in labor and material costs would make it impossible to carry out the program. In fact, the high cost of labor and materials is the most serious problem that confronts us today, and one of the principal causes of the recession, which is already sapping business earning power to a point where further capital expenditures for new plants and equipment have become profitless—an unhealthy situation as far as the worker and our economy is concerned.

The Right Road

The right road as we see it is along the lines suggested by President Eisenhower. And we refer to the extension of unemployment insurance benefits as the most direct form of aid and the least costly, because part of this revenue would come from the unemployment compensation funds accumulated and those currently being paid in by employers all over the country.

And this should be augmented from benefit payments to the workers by their unions. This is the time they should be dipping into their swollen funds to tide their members over a bad spot. What do they accumulate this money for if not to use it for the workers in times of stress.

Working together, the situation can be greatly alleviated in a way that would give assurance to the country at large that the recession will be met by common sense and responsible measures which will enable us to stage a come-back that will leave our financial and economic position unimpaired.

Already various states and cities, in lieu of unemployment payments, are offering employment on local projects, such as highway maintenance, the care and repair of public buildings and the various avenues that can be quickly utilized to enable the unemployed to retain their sense of dignity and usefulness. And the reports are that the plan is meeting with considerable success and appreciation for the opportunity to work.

Halt and Give the Pass Word!
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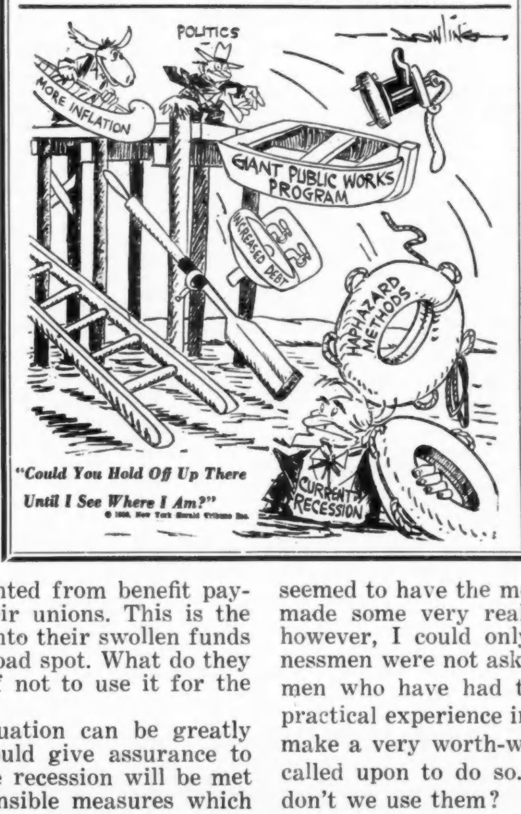


"Could You Hold Off Up There Until I See Where I Am?"
© 1958, New York Herald Tribune Inc.

Politically motivated planning has had a disorganizing effect on our economy, and the half-baked solutions suggested one day, and retracted the next, have produced the impression of chaotic thinking, that is merely grasping at straws. This has created irritation and frightened criticism from our neighbors to the North and the South, as well as the "dollar bloc" abroad. It hasn't helped any. Indeed it has furthered the Kremlin campaign to drive the wedge deeper.

Thus far, even though the dollar has declined in value, confidence in the USA has remained unshaken, in the belief that America has the ability to work out an eventual sound solution to its problems. And now if we are foolish enough to risk the world eminence of the American dollar as a standard of value — a medium of exchange — and a storage house for buying power — our position as a world power would be seriously impaired — with all that means in terms of trade, commerce and investment.

Frankly, the situation is critical. Yet a sound solution can properly be worked out if we permit the right kind of thinking to prevail.

But, after listening to the generalities expressed by economists on TV the other night, there seems to be a dearth of ideas for solving our problem. Dr. Friedman seemed to have the most practical turn of mind and made some very realistic suggestions. Altogether, however, I could only wonder why practical businessmen were not asked to participate in the forum, men who have had their theories knocked out by practical experience in the business world who could make a very worth-while contribution if they were called upon to do so. Possessing such brains, why don't we use them?

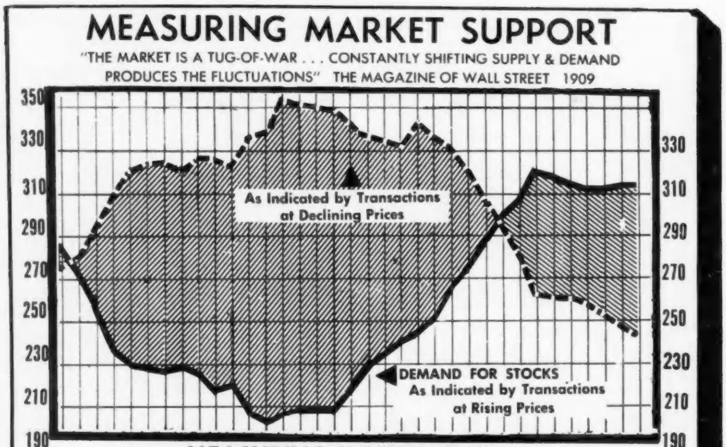
Political "Pap"— Market Factor

Despite currently improved sentiment, evidently based on expected Government moves to combat the recession, the industrial and rail averages remain under the early-February rally levels. The primary need is a recovery in corporate earnings. It is not in sight, and may be absent for some time to come. There is no change in our conservative, selective policy.

By A. T. MILLER

The short-term swings in this selective, trading-range market have recently become smaller in scope, thus leaving the industrial and rail averages in a tightening "corner", out of which they probably will before long either move into some extension of the irregular recovery phase maintained by the industrial list since last October and by rails since late December, or give up the effort and shift to another downside test. Which it might be is conjectural at this time.

To illustrate: the industrial average reached a recovery top at 459.77 (intra-day extreme) on February 4; fell 25.73 points to February 25; rose 23.23 points to March 11; fell 13.86 points to March 18; and rose 10.16 points to 453.57 at the subsequent best level last Friday. Rail movement has been similarly restricted, particularly since early March. A modest further rise over the last fortnight took the utility average to within a small fraction of the bull-market top recorded last May.



Evidence Of Better Sentiment

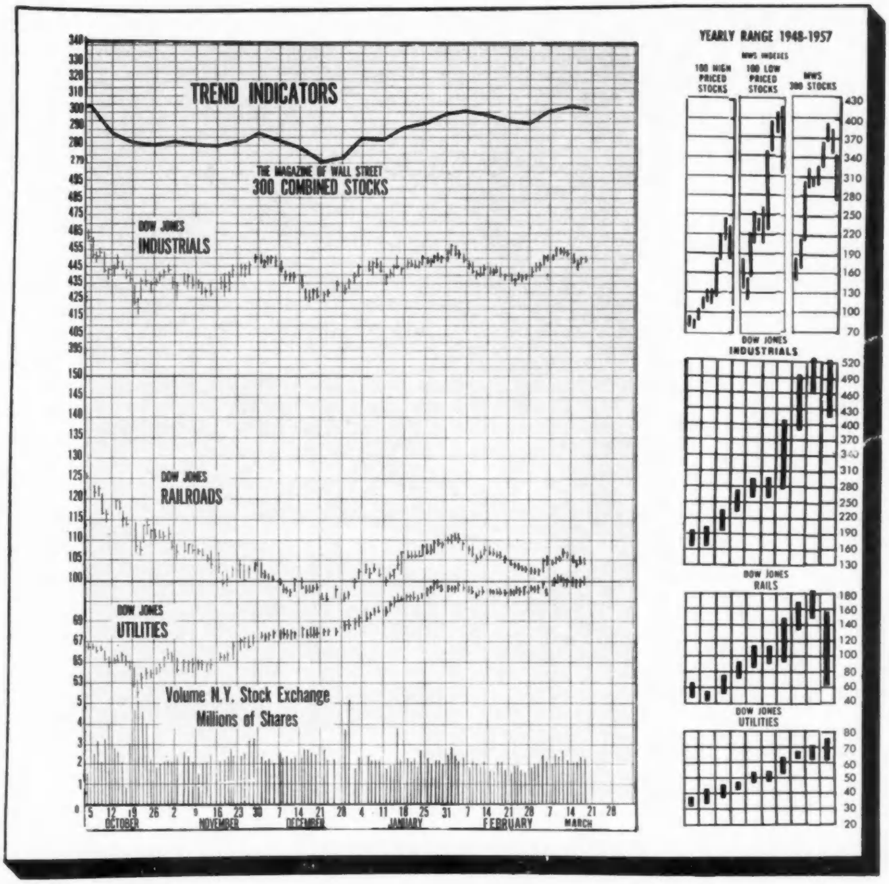
While the performance can be called no better than indecisive as long as the industrial average continues in the less than 6% range bounded by the February high and low, investment-speculative sentiment seems generally more hopeful than in some time. Testifying to that, trading volume, although moderate, has tended to contract on recent dips in stock prices, and to expand on market rallies. As additional evidence, an increased number of individual stocks attained new 1957-1958 highs last week, even though they foot up to a small minority of issues traded. Investment-grade income stocks continue to dominate the list of new highs, but to a lesser extent than in the recent past, in reflection of at least a moderate spreading out of demand along more venturesome lines.

Since there is nothing stimulative in medium-term prospects for business activity, corporate earnings and dividends, improvement in sentiment at the market's present recovery level can only rest on the inflationary aspects of anti-recessionary proposals.

The promise of Government action, aimed at helping to halt and reverse the recession, has become a market factor of some psychological weight and tends to lessen selling pressure to a degree.

So far Federal spending is rising only slowly, with limited action so far; and the significance of remedial moves is

exaggerated both in Administration announcements and in newspaper headline treatment. *Item:* First-page "news" — that the Army will soon give the slumping automobile industry $100 million in defense orders. That would equal about ½ of 1% of combined 1957 sales of General Motors, Ford and Chrysler; it will take many months to translate into sales; and they will carry profit margins well under those on civilian business. *Item:* A housing bill "designed" to create 500,000 jobs and to add 200,000 to the total number of residential units to be built in the next 12 months. It is a good bet that not more than a moderate fraction of either figure will be attained.



The recession fighters in Congress are getting publicity with talk, with New-Dealish schemes; and by the introduction of spending bills or tax-cutting bills which they know will not be acted on. Predictions of what the deficit will be are a dime a dozen, many of them ranging from $10 billion to $20 billion for the year starting July 1. The President appears to be vacillating; the top Democratic leaders to be shadow-boxing while building issues for the November elections. Actually, they (Johnson and Rayburn) are sensible, middle-road men, as is the President. It is to the good that they are resisting panic pressure for a crash program to combat the recession. At this time — subject to change without notice — indications are that the start on "stimulative" tax legislation will be deferred for at least several weeks, and possibly for a couple of months.

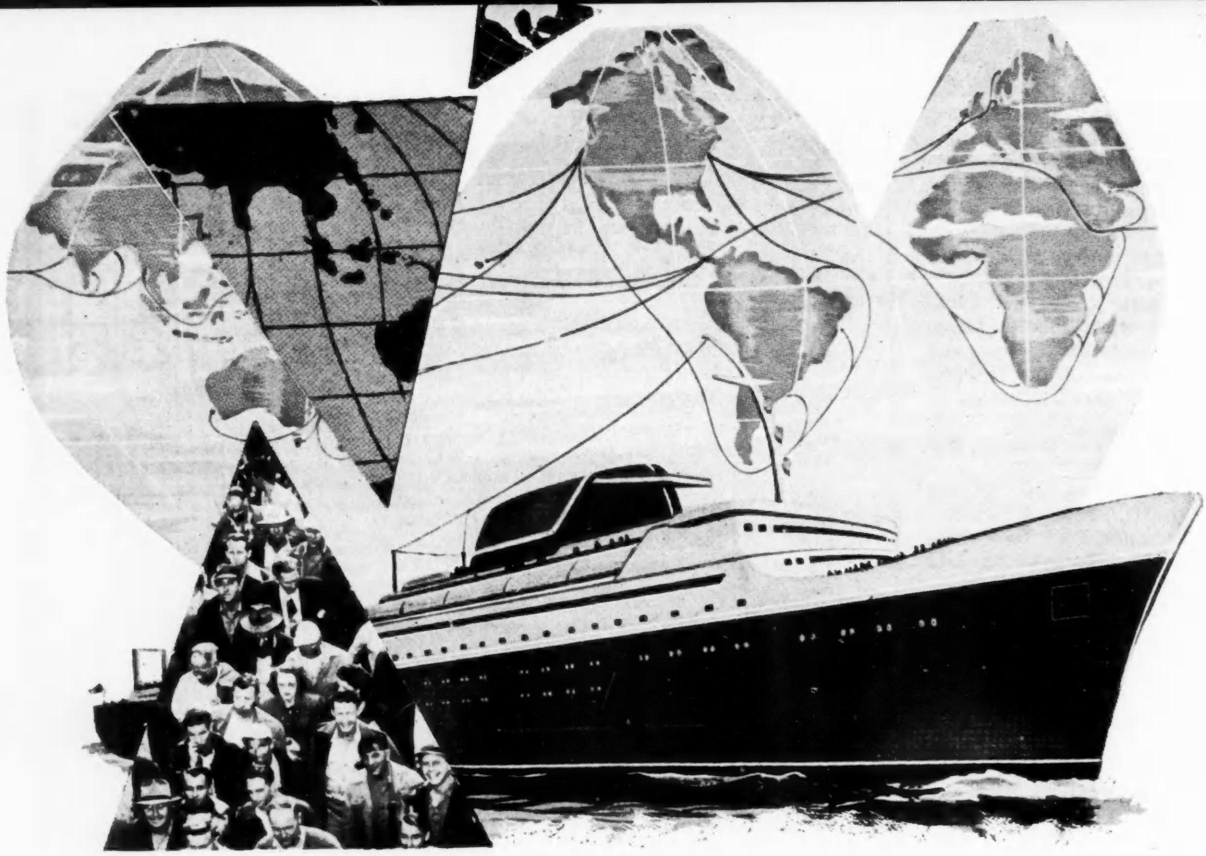
Washington opinion is that some tax cutting and some further step-up in public works spending are politically inevitable. If fairly moderate, they will not do the economy much interim good—or irreparable long-run damage. If enough to be decisively inflationary, before the wage and price excesses of the recent boom have even been digested, much less corrected, they can only do serious long-term harm.

Some Perspective On Deficit Spending

The New Dealers talked big about "planning", with private enterprise paying the bills. We recall the late President Roosevelt's boast, in the autumn, 1936, political campaign, that the country at last had a sound prosperity — not by a "mere turn of the cycle", but "because we planned it that way." That was not many months before the start of a depression which, in no great time, saw the index of production fall some 33%; and the number of unemployed persons rise from 7,780,000 to 11,400,000 over the same period. Before World War II changed the picture, there was an average of 7,900,000 jobless people in 1940, about 14% of the civilian labor force. That was after about seven fiscal years of New Deal deficit financing at a cumulative total of some $21 billion.

Partly by happenstance (reduced tax receipts as a result of depression) one of the New Deal's largest prewar deficits was $3.92 billion in the year ended June 30, 1939, in which month unemployment, as then reported, equalled some 19% of the labor force. That year's budget deficit was equivalent to about 4.6% of 1938 gross national product. To get equally ineffective results — other things being equal —a comparable deficit at the present level of gross national product would have to be about $20 billion.

Certainly the tax cut plus easier credit is not going to solve any problems. It will only intensify them. Public works? On the whole, the building industry is not depressed (with February outlays at a new peak for month) and its prices are among the most inflated in the entire economy. By adding jobs, and more cost inflation, in this field, how much do we aid the unemployed automobile worker? Increased Government spending — at least enough for decent, but not incentive-killing, care of the unemployed — can temporarily offset reduced private spending and investment, helping to hold the economy in tolerable balance; but it is not a *(Please turn to page 56)*



SOUND FOREIGN ECONOMIC PROGRAM

— Goes to core of our domestic well-being

BY JAMES J. BUTLER AND JOHN H. LIND

"Reciprocal trade" agreements is as precise a description for one pending item of legislation as "foreign aid" is a misnomer for another bill now before Congress. The fact is that the two measures might better be combined under a title such as: "A Bill to Safeguard Peace Through International Economic Strength."

In the welter of argument over "give-away" and "exporting American jobs," sight could be lost of the fact that the United States cannot exist as an island of healthful prosperity in a sea of economic distress. International trade is a two-way street. What many choose to call foreign aid is, in correct title and in fact, Mutual Cooperation. We have 5.2 million unemployed persons today but we have almost a matching number – 4.5 million persons, according to the U. S. Department of Labor—whose jobs depend on trade moving in both directions.

No one can guarantee that there will not be job dislocations in any system of international commerce. There always was. The United States had been wallowing in a panic brought on to some extent by the depressive effect of the Smoot-Hawley Act when in 1934 Senator Cordell Hull brought his Reciprocal Trade Agreements Act into existence whose major aim was to revive America's trade with the rest of the world. As Mr. Hull pointed out at the time, American exports of all products in 1933 had fallen to half of the 1929 volume and one-third of the 1929 value. The impact of this on our depression-ridden economy was obvious. In the words of the Presidential message requesting enactment of the program, "a full and permanent domestic recovery depends in part upon a revived and strengthened international trade" and "American exports cannot be permanently increased without a corresponding increase in imports." These principles are as true today as they were 25 years ago.

If Congress rejects the President's proposal for a new and less flexible trade agreements law, we may well be laying the groundwork for more unemployment, rather than less. Though the fear that the law would eliminate jobs at home is at the heart of the opposition to it, upwards of 4.5 million working persons in the United States could conceivably become its victims.

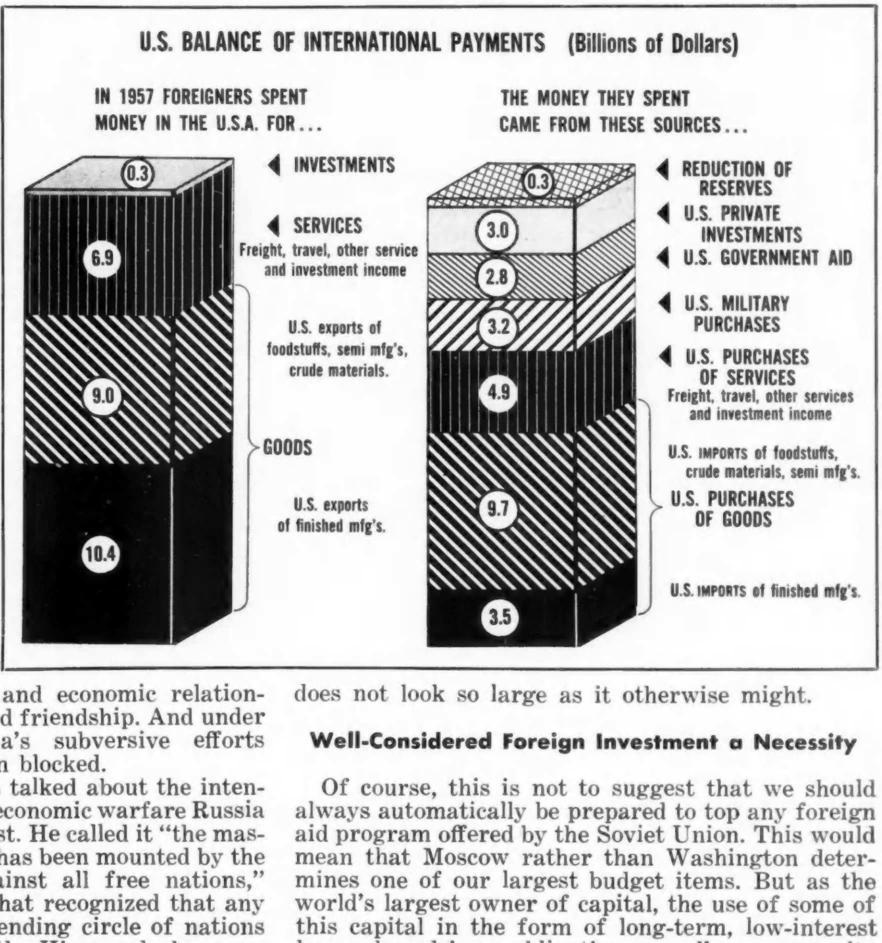
And if Congress refuses to grant the full amount of Mutual Aid budgeted by the President, the lawmakers will be playing directly into the hands of the communist planners. It has been said that the best argument in support of this bill is that the Reds found it so successful that they decided to copy it. That raises the question whether the United States will part company with success, vacate the field, and leave it to the Kremlin to capitalize on.

Trade treaties breed mutual cooperation – and both are important in the scheme for economic survival. Together, supplemented by military coordination, they come as close to writing a guarantee as seekers after peace can hope to get today. To adopt one but not the other impairs the solidity of our bond, its scope and financial strength, in direct proportion to the degree of deviation.

To the Core of our Well-Being

If the economy slumps in any of the major foreign countries friendly to the United States, this country is unlikely to escape its impact. If two or more go down, the cost of resuscitation and of shoring up other geographical points will dwarf spending contemplated in this year's bill. There are questions of political ideology and humanitarianism blended in the issues before Congress, *but there also are considerations that go to the core of our domestic well-being.*

If Congress haggles over foreign political matters such as lack of comformity to democratic customs, and rejects association with countries which are being eyed by the keepers of the Red exchequer, our political piety will prove to be a costly indulgence. Of necessity our approach should be practical and constructive. By cementing sound trade and economic relationships–we build confidence and friendship. And under such circumstances, Russia's subversive efforts would be impaired–and even blocked.



President Eisenhower has talked about the intensification of the campaign of economic warfare Russia has launched against the West. He called it "the massive economic offensive that has been mounted by the communist imperialists against all free nations," and spelled out a program that recognized that any serious weakness in the defending circle of nations would sap our own strength. His words bear rereading:

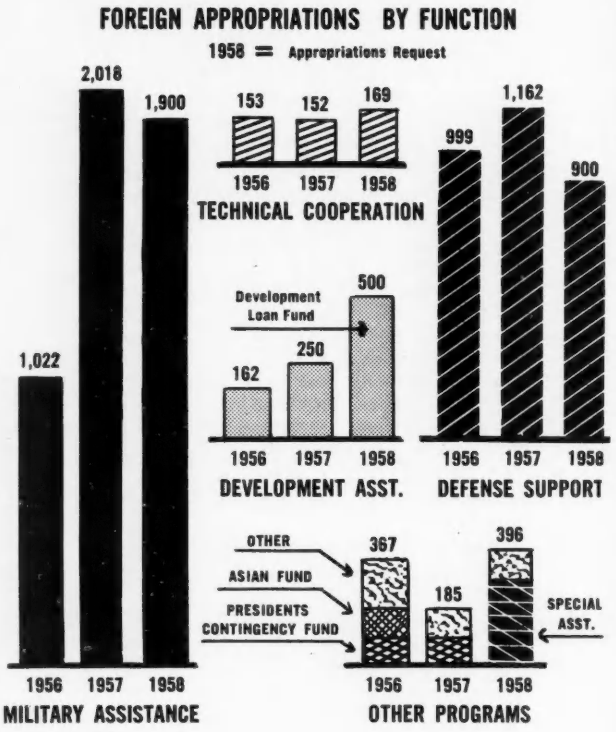
"This non-military drive, if underestimated, could defeat the free world regardless of our military strength. This danger is all the greater precisely because many of us fail or refuse to recognize it. Thus, some people may be tempted to finance our extra military effort by cutting economic assistance. But at the very time when the economic threat is assuming menacing proportions, to fail to strengthen our own effort would be nothing less than reckless folly!

"Admittedly, most of us did not anticipate the psychological impact upon the world of the launching of the first earth satellite. Let us not make the same mistake in another field, by failing to anticipate the much more serious impact of the Soviet economic offensive."

Thus, foreign aid can obviously not be stopped at this moment in world affairs. Our government's requested Mutual Security fund for the coming fiscal year totals \$3.9 billion, or \$500 million less than the government had requested a year ago when the Soviet economic drive was still much slower and no sputnik marred our skies. In the knowledge that the Soviet block has pledged (and partly delivered) \$1.9 billion in military and economic aid to selected targets in underdeveloped areas in the last three years, the amount budgeted by the U. S. Government does not look so large as it otherwise might.

Well-Considered Foreign Investment a Necessity

Of course, this is not to suggest that we should always automatically be prepared to top any foreign aid program offered by the Soviet Union. This would mean that Moscow rather than Washington determines one of our largest budget items. But as the world's largest owner of capital, the use of some of this capital in the form of long-term, low-interest loans abroad is an obligation as well as a necessity for the United States. The suggestion, often heard, that such a job should be left to private capital is not tenable. Of the \$2.75 billion of new U. S. private foreign investment in 1956, only one-eighth went to the underdeveloped countries of Asia and Africa where it is needed most and where the East-West struggle for the world's non-committed areas is centered. And even of that one-eighth, the bulk



Leading Categories of U.S. Exports and Imports in 1956 and Main Producing States

(Millions of dollars)

Commodity Group	Exports	Imports	Main Producing States
Petroleum Products	761	1,269	Ark., Calif., Colo., Ill., Ind., Kan., La., Pa., Texas
Building Materials	147	150	Ala., Calif., Colo., Ga., Miss., Mo., Kan., Pa., W. Va.
Machinery and Parts	2,691	276	Ala., Calif., Colo., Ga., Ill., Iowa, Ind., Kan., Kentucky, Mich., Miss., Md., Mass., Minn., Mo., Neb., N. J., N. Y., No. Car., Okla., Ore., Ohio, Pa., R. I., S. Car., Texas, Wash., Wisc., W. Va.
Rubber and Products	211	423	Calif., Colo., Conn., Del., Ind., Iowa, Md., Mass., Mich., Neb., N. J., Ohio, Okla., R. I., Tenn.
Edible Farm Products and Preparations	1,055	243	Ala., Ark., Calif., Colo., Del., Fla., Ga., Ill., Ind., Iowa, Kan., Ky., La., Md., Mich., Minn., Miss., Mo., Neb., N. Y., N. Car., N. Dak., Ohio, Okla., Ore., Pa., S. Car., S. Dak., Tenn., Texas, Va., Wash., Wisc.
Tobacco and Products	399	94	Ga., Ind., Ky., Md., N. Car., S. Car., Ohio, Tenn., Va., W. Va.
Cotton, Textiles, Synthetics and Apparel	2,072	NC	Ala., Ark., Calif., Colo., Conn., Del., Ga., Ill., Ind., Iowa, Kan., Ky., La., Md., Mass., Miss., Mo., N. J., N.Y., N. Car., Ohio, Okla., Ore., Pa., R. I., S. C., Tenn., Texas, Va., Wash., W. Va.
Coal and Products	821	61	Colo., Ill., Ky., Pa., W. Va.

NC—Not available on a comparable basis.

went for oil developments in the Middle East, leaving only an insignificant amount for the rest of the two continents.

But there is still another aspect to foreign aid which concerns us even more directly. Approximately seventy percent of all money spent on foreign aid returns to the United States in the form of export orders for our factories. The argument of some Congressmen that we should not give money to help foreigners when our own economy is badly off is, therefore, putting the cart before the horse. If we reduce our foreign aid now, we will reduce our export business and thereby add to the existing recession. Furthermore, making legitimate loans abroad does not mean we will have less money to spend at home. After all, the U. S. economy is not suffering from a capital dearth. On the contrary, with business loans falling and planned business expansions being curtailed we have a surplus of capital.

The same general argument applies to our foreign trade policy. We export considerably more than we import. Last year, our total exports amounted to $21 billion while our purchases from abroad stood at just $13 billion. The resulting export surplus of $8 billion was nearly $1.4 billion larger than the corresponding figure for 1956. The reason for this is that while our imports had virtually stood still in 1957 our exports had grown by nearly 10 percent. Thus, our foreign trade has already greatly helped to cushion the impact of our domestic recession. Exactly the same thing happened in the 1954 recession.

The Dollar Gap

It is likely to happen again in 1958 if we do not make it more difficult for foreign countries to earn dollars here by erecting protective walls against foreign goods and curtailing foreign aid. The bothersome dollar gap abroad has already reared its head again, after having been in hiding since 1953. If we add to it, we are likely not only to weaken ourselves but also our major trading partners abroad.

What this could mean to American business in dollars and cents has recently been brought out in an interesting case study made for the Caterpillar Tractor Co. The study shows that without its export business, Caterpillar would not need the services of at least 40 per cent of its people employed in the United States. At the peak of 1957, this would have meant about 14,500 people; at the end of the calendar year, about 12,000. Had exports not held up better than domestic sales, 4,000 payrollers would have gone in any event.

By far the greater proportion of these layoffs and work curtailments would have to take place at the main plant in Peoria, Ill. Population of that general area is 250,000. The effects of a substantial fluctuation in Caterpillar employment is readily apparent.

At York, Pa., the plant is concerned

mainly with conduct of the foreign business. Sales for export were 65 per cent of all shipments from that point. Using the 40 per cent ratio against an employment of 1,200 persons gives the picture as to York's interest in foreign trade. In the overall the firm's payroll for 1957 would have been $75 million less than it was. Without the inclusion of many fringe benefits, the payroll for the year totaled $189 million.

But that isn't all. Caterpillar, like other firms, has suppliers whose business rises or falls with that of their customers. Caterpillar's non-capital purchases in the United States in 1957 totaled $290 millions, divided among 5,400 suppliers. Of this amount $67 million went to purchase 434,000 tons of steel, requiring the employment of about 3,500 persons in the steel industry.

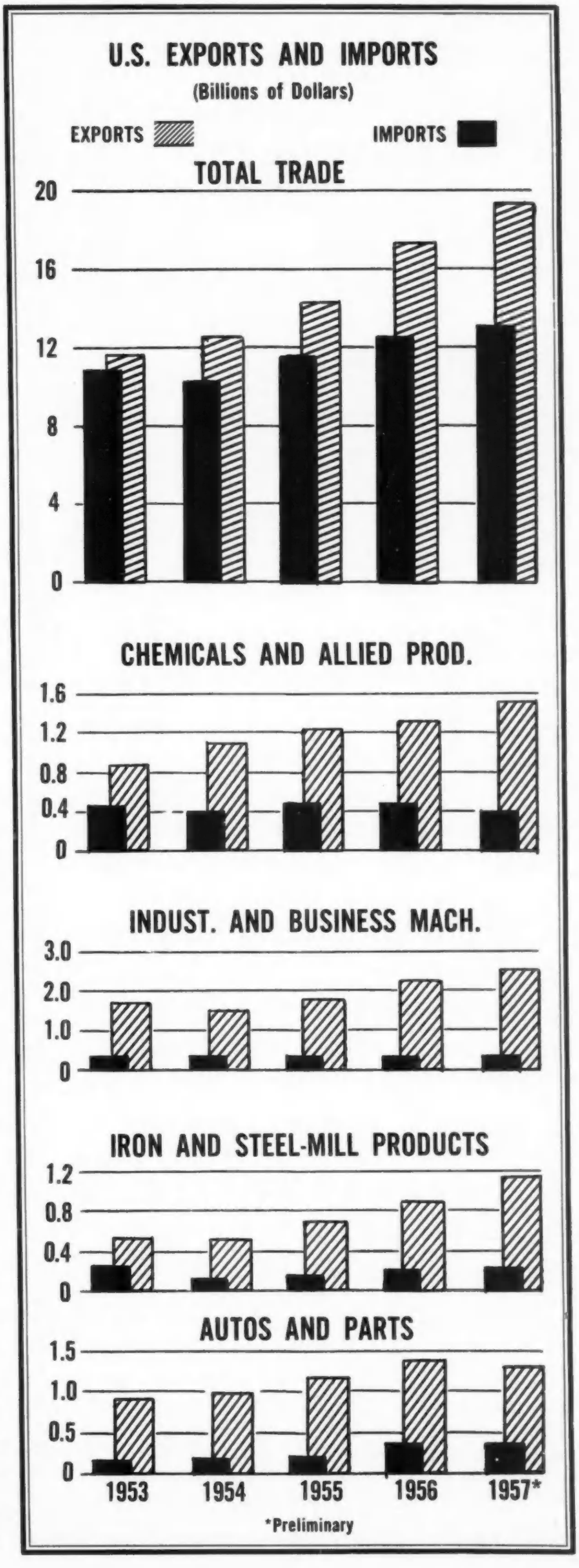
This is cited to show that the jobs of millions of Americans are protected, not by U. S. tariffs but by the ability of companies to sell in the export market.

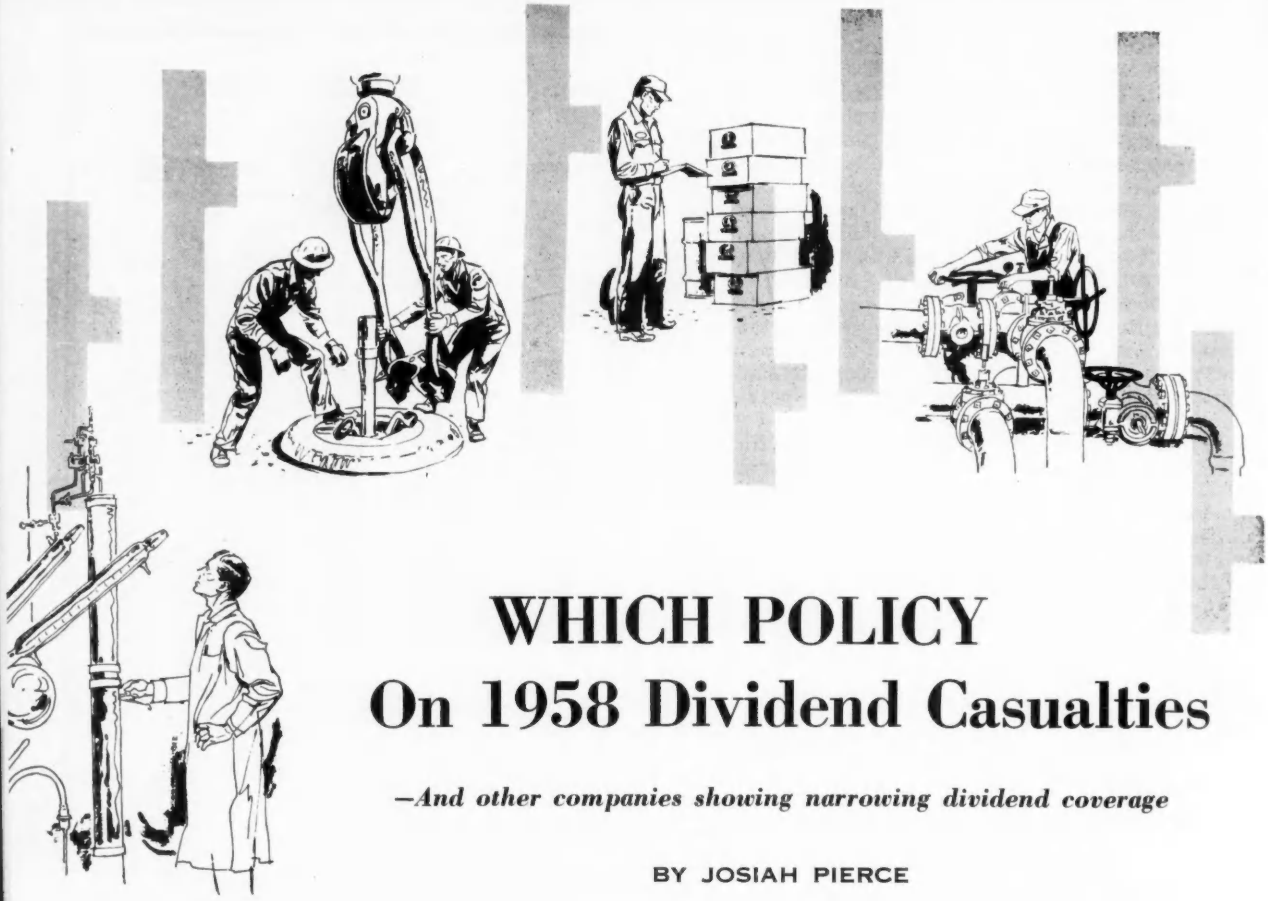
The story of Caterpillar parallels the recitals of other firms in the export business and their effect on the foreign commerce. Mutual Assistance moves along with export, backing and filling as needed, always rounding out a smoother economy. Adequate amounts of acceptable purchasing power in the hands of people in other countries, keeps the export trade alive, and it is reciprocity, represented in our purchase of commodities from them, that provides that capital.

High Tariffs Could Injure Free World Economies

Thus, a victory of the protectionists in Congress could destroy this beneficial flow of goods and capital across borders and replace it by a chain-reaction of retaliations and counter-retaliations throughout the free world which could turn our still relatively mild recession into a world-wide depression. As all students of international economics know, this is what happened in the thirties. And as all politically informed people know, this is what the Soviet Union would desperately want to happen again. This was clearly expressed by the recent day-dream prognosis of Prof. Eugene Varga, the Soviet Union's most venerated Marxian theoretician, who said, "the slump in the United States is bound to be transferred through foreign trade, the stock exchange, the international loan market, and loss of confidence, to all capitalist countries."

The argument sometimes is advanced that after we buy goods from foreigners, they do not spend the proceeds buying from us, but leave them in the bank in the United States to buy gold and hoard that. If we buy goods and services abroad, it may be a fact that the proceeds remain on deposit here, but eventually these credits, insofar as they are not needed as working capital, will be spent in the United States. If the foreigner selling to us exchanges the dollar credits for goods in a third country the third-country seller eventually can use the dollar only by buying United States goods. Dollars can be a medium of exchange between other countries, but to be spent as currency they have to come home eventually to the United States. The certainty of this simple fact is the reason why foreign trade is called a true two-way street, equally travelled by exporter and importer nations. —END





WHICH POLICY On 1958 Dividend Casualties

—And other companies showing narrowing dividend coverage

BY JOSIAH PIERCE

It is more difficult to get an investor to sell a stock than to buy one—and yet an investor should have an open mind regarding any security he buys and must expect changes and shifts to take place in such a revolutionary period as that through which we are passing, just as he would in a business that is his primary source of income.

Therefore, an investor must continuously check his securities. The important things he should watch include backlogs, new orders, working capital, profit margins and particularly the ratio of earnings to dividends. Only in this way can he judge the rise and fall of investment values of the securities that he holds.

There are times when a stock should be sold, if some fundamental change has adversely affected the business of the company. On the other hand, if the position of the company is sound and the change is only temporary, then the stock should be held. In considering a sale, it is necessary to take into account how much the stock has declined in price and thus to judge whether it has already discounted or reflected the adverse factors.

In our issues of February 1st and October 12th, we pointed out a number of stocks with narrowing dividend coverage. Some of those companies have since reduced or passed their dividends. Our articles enabled subscribers to withdraw from these stocks before they became casualties. In this article, we are appraising leading companies that have cut or deferred their dividends in the past six months, as well as other companies where narrowing dividend coverage suggests possible changes in payments to stockholders.

In what has been termed "this dreary dividend season," cuts and omissions have been accelerating in recent weeks. Dividend casualties have affected large and small companies alike, and have been spread over diverse fields of business activity. While heavy industries such as steel and non-ferrous metals have been hit hard, consumer goods and retail trade have not escaped the effect of the general business recession.

The circumstances governing dividend action by directors vary widely between industries and individual companies. Directors must consider a company's cash position, expansion plans, present and prospective earning power and dividend policy, as well as numerous other factors. If the industry is highly cyclical, with wide changes in earnings from time to time, then dividends are often determined by the level of profits and changed accordingly. Again, if rising costs are resulting in a profit squeeze and no immediate improvement is in sight, the dividend may be reduced even though there is no immediate need to conserve cash. On the other hand, some companies have long established dividend records, based on stability of earning power or on relatively conservative payments. In such instances, directors are usually reluctant to reduce dividends, except under circumstances that suggest the wisdom of such a course.

Recent Dividend Cuts and Omissions

	1956 Earnings Per Share	1956 Div. Per Share	1957 Earnings Per Share	1957 Div. Per Share	Price Range 1957-58	Recent Price	Previous Quar. or Periodic Payment Per Share	Latest Quar. or Periodic Payment	Ratings
Acme Steel	$ 2.94	$2.00	$2.40	$2.00	38⅜-19⅜	21	$ .50	$ .25	B3
American Smelting and Refining	6.67	3.50	3.94	3.00	63¾-35⅛	44	.75	.50	B3
Anaconda Co.	12.85	5.00	4.00[1]	3.75	72⅞-39¼	44	.75	.50	B3
Bliss (E. W.)	3.01	2.00	2.90	2.00	29¾-12½	15	.50	.25	B3
Borg-Warner	4.01	2.30	3.90[1]	2.40	46 -25⅞	28	.60	.50	B3
Bucyrus-Erie	3.64	2.40	3.00	2.00	52¾-24	27	.50	.25	B3
Bulova Watch	1.74	1.40	1.20[1]	1.20	21 - 9¾	10	.25	.20	B3
Cerro de Pasco	6.52	1.60[4]	2.85[1]	1.60[4]	59⅝-24⅛	29	.40	.25	B3
Commercial Solvents	1.21	1.00	.53	.92½	19½- 9⅞	11	.17½	.12½	C3
Copper Range	4.88	1.00[4]	1.15	1.00	43½-16½	21	.25	.12½	B3
Crucible Steel of America	3.51	1.50	1.73	1.60	38⅜-15⅝	18	.40	.10	B3
Curtiss Wright	5.64	2.50	5.07	3.00	47⅜-20⅝	23	.75	.62½	B3
Detroit Steel	2.78	1.00	.90	1.00	22⅞- 8¾	10	.25	.12½	C3
Firth Carpet	1.40	.65	1.40[1]	.60	12⅛- 6½	7	.15	.07½	C3
Foster Wheeler	2.31	1.60	[d]1.39	1.60	67¾-25⅛	29	.40	[6]	B3
Fruehauf Trailer	.94	1.40[4]	.85[1]	.70[4]	24¼- 8¾	11	[5]	[6]	B3
General Controls	1.49	1.00	1.50[1]	1.00	25¼-14¼	14½	.25	.15	B2
Goebel Brewing	.08	......	.10[1]	.10	4¾- 2¼	2¾	.05	[6]	C2
Granite City Steel	7.04	2.50	4.64	3.00	59⅜-26¼	32	.75	.40	B3
Great Northern Paper	5.44	3.00	2.42	2.40	85 -39	41	.60	.15	B3
Grumman Aircraft Eng. Corp.	3.50	2.00	2.38	1.75	34⅝-15¼	18	.50	.25	B3
Hamilton Watch	3.98	1.40	2.25	1.40	28¼-13½	14	.35	.25	C3
Harris-Intertype	4.40[2]	1.85	4.02[2]	2.00	39½-23½	24	.50	.37½	B3
Hercules Motors	.41[3]	.80	.79[3]	.60	17¾- 9⅜	11	.20	[6]	C3
Industrial Rayon	2.45	3.00	.65	1.75	39⅛-13½	16	.25	[6]	B3
Inspiration Consol. Copper	7.21	5.00	3.15	3.25	55⅜-25⅛	33	.75	.50	B3
Jefferson Lake Sulphur	2.16	1.60	1.60[1]	1.50	47¾-18	23	.40	.30	B3
Lowenstein (M.)	1.98	1.50[4]	1.07	1.25	22 -11	13	.25	.20	B3
Marchant Calculators	3.13	1.30[4]	.90	1.30[4]	38 -13¼	17	.32½	.15	B3
McCrory Stores	1.40	1.00	1.36	1.10	13¾-11	11	.25	.20	B3
McLellan Stores	1.72	1.60[4]	1.70[1]	1.50	19⅞-12¼	13	.35	.25	B3
Miami Copper	11.88	6.25	3.50[1]	4.00	50¾-24⅛	27	.50	.25	B3
Motor Wheel	1.70	1.80	1.25[1]	1.60	23⅝-12½	14	.40	.25	C3
National Steel	7.09	4.00	6.13	4.00	80¼-49	53	1.00	.75	A3
Philco Corp.	.05	.80[4]	1.00	[7]	18⅜-11	15	[5]	[6]	B3
Pittsburgh Steel	3.24	1.00[4]	1.80	1.00[4]	37¼-14	16	.25[4]	[6]	C3
Plymouth Oil	3.22	1.60[4]	2.40	1.60[4]	38 -22⅜	23	.40	.30	B3
Rayonier	2.65	1.40	1.13	1.40	34⅜-14	16	.35	.20	B3
Rheem Mfg.	[d] 5.01	1.00	1.50[1]	.10	21¼-10	13	.10	[6]	C1
Rome Cable	4.04	1.40[4]	2.50[1]	1.40[4]	32½-13½	20	.35	.25	B3
St. Joseph Lead	3.79	3.00	2.95	2.00	46½-22	25	.37½	.25	B3
Scovill Mfg. Co.	2.81	2.25	1.31	2.00	33½-21	22	.50	.25	B3
Sharon Steel	6.28	3.00	3.68	3.00	58⅛-25	28	.75	.35	B3
Sunshine Mining	.52	.45	.02	.40	15¼- 6⅝	8	.10	.05	B3
Texas Gulf Sulphur	2.81	2.00	1.75	1.75	33 -14½	17	.50	.25	B3
Underwood Corp.	[d]10.91	1.10	[d]2.13	.40	33¾-12⅛	15	.10	[6]	C3
U. S. Plywood	3.24	2.20	2.50[1]	2.00	36⅛-24⅜	28	.50	.37½	B3
U. S. Smelting & Refining	4.50	3.75	[d]1.58	.50[4]	64½-25	31	.25	[6]	B3
Wheeling Steel	8.20	3.00	5.32	3.40	69¾-33⅝	37	.85	.50	B3
Whirlpool Corp.	2.21	1.40	1.61	1.40	26⅞-15¾	18	.35	.25	B3

[d]—Deficit.
[1]—Estimated.
[2]—Year ended June 30.
[3]—Year ended July 31.
[4]—Plus stock.
[5]—Paid in stock.
[6]—No dividend action.
[7]—Paid 4% in stock.

RATINGS:
A—Best Grade.
B—Good Grade.
C—Speculative.
D—Unattractive.
1—Improving earning trend.
2—Sustained earning trend.
3—Lower earning trend.

Finally, even under similar circumstances and in the same industry, directors of one company may appear to reach a different conclusion judging by their dividend action, than those of another company.

For instance, **Anaconda Company** recently reduced the quarterly dividend payable in March from 75¢ to 50¢ per share, following a cut from $1.00 to 75¢ last December. At the same time, **Kennecott Copper** declared the regular $1.50 per share quarterly dividend paid throughout last year. Anaconda's earnings for the year 1957 (not yet reported) are estimated at around $4.00 per share, compared with $12.85 reported for 1956. In the third quarter of last year, Anaconda earned only 70¢ per share, thus pointing to the dividend reductions mentioned. On the other hand, earnings of Kennecott Copper, largely from low-cost domestic mines, have held up better than Anaconda's, thus suggesting at least one reason for recent dividend maintenance. For the year 1957, Kennecott reported $7.32 per share, as against $13.23 for 1956. However, in both the third and fourth quarters of last year, indicated earnings were a little below Kennecott's $1.50 quarterly dividend. Thus, a cautious view toward continuation of such payments is indicated. Both companies are leaders in the copper industry with diversified activities. Both have been adversely affected by the large decline in metal prices. The current level of their common stocks is substantially below the 1956 high, in each instance. However, the supply-demand situation in the copper industry is not too favorable. Therefore, near-term prospects for both stocks are

unimpressive.

A similar situation prevails in other non-ferrous metals that have declined drastically in price. For example, **St. Joseph Lead**, a leading low-cost producer of lead and zinc, recently reduced the March quarterly dividend from 37.5¢ to 25¢ per share. This followed cuts from 50¢ to 37.5¢ per share in September, and from 75¢ to 50¢ in June of last year. Earnings for the year 1957 were $2.95 per share, compared with $3.79 in 1956. However, indicated earnings were only 52¢ per share in the third quarter and 31¢ in the fourth quarter of 1957. Thus, the reason for successive dividend cuts is fairly apparent. The stock has declined substantially in price, but the immediate outlook continues to be clouded.

While the steel industry is less cyclical today than non-ferrous metals, it has suffered recently from a low level of demand for its products. At this point, it is interesting to review briefly the reasons behind recent dividend cuts by two of the larger steel companies. One reduction was relatively moderate. The other was drastic.

National Steel reduced the March quarterly dividend from $1.00 to 75¢ per share. In contrast, **Crucible Steel** cut the March payment from 40¢ to 10¢ per share. However, the two companies are hardly comparable, other than the fact that they operate in the same industry. National Steel, the fifth largest producer, is well integrated as to raw materials. Its plants are strategically located. The greater part of its revenues are derived from sheet, strip and tinplate. Its competitive position is strong. It is the only major steel producer to show a profit every year since 1929. Earnings last year were fairly well maintained at $6.13 per share, as against $7.09 in 1956. On the other hand, Crucible Steel, a smaller company by comparison, produces mostly tool, alloy and specialty steels. Demand for these products is volatile. Consequently, the company's earnings have fluctuated widely, with losses sustained in depression years. For the year 1957, earnings declined to $1.73 per share from $3.51 in 1956. Last year, indicated fourth quarter earnings of 19¢ per share followed a small third quarter deficit. Thus, Crucible's drastic dividend cut is understandable. In the case of National's moderate dividend reduction, the current low level of demand for automobile steel was probably an important reason for the action taken.

In our March 15th issue, we reviewed the building and construction industry. We may comment, at this point, on the dividend outlook of a leading company in this field.

American Radiator & Standard Sanitary has declared quarterly dividends of 25¢ per share (including the March payment) since the rate was reduced from 35¢ to 25¢ last June. However, earnings for the year 1957 amounted to only $1.05 per share, representing a bare margin over the current dividend rate. Earnings last year were down sharply from $1.65 per share reported for 1956 and $2.05 for 1955. The decline in earning power has been due mainly to a lower level of residential building and to severe competition in some of the company's products. American Radiator is the largest producer of heating and plumbing equipment. While it has broadened its activities to include other lines, its business is dependent primarily on residential construction. Some improvement in home building may take place this year. It is evident that the government is planning various steps to stimulate new housing starts. Nevertheless, rising costs and competition may result in continued pressure on American Radiator's profit margins. Consequently, any near-term improvement in earning power may be very moderate. Thus, continuation of the current dividend rate is not assured, to say the least. Therefore, notwithstanding the very substantial decline in price, the stock still carries a considerable element (*Continued on page 46*)

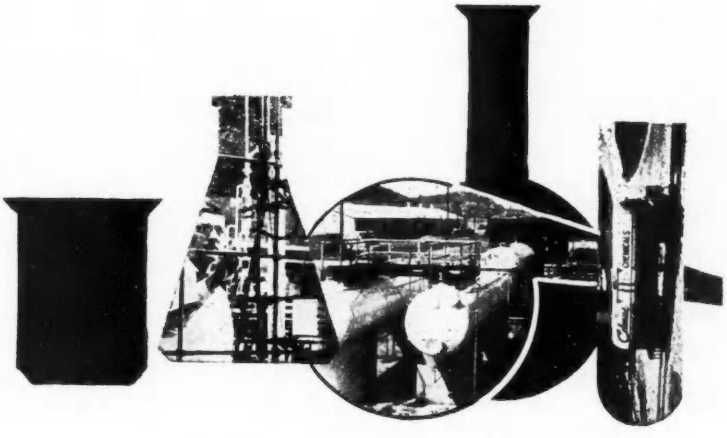
Companies With Narrowing Dividend Coverage

	1956 Earnings Per Share	1956 Div. Per Share	1956 Percent Pay-Out	1957 Earnings Per Share	1957 Div. Per Share	1957 Percent Pay-Out	Price Range 1957-58	Recent Price	Div. Yield	Ratings
Allis-Chalmers	$2.42	$2.00	82%	$2.11	$2.00	94%	36¼-20⅞	24	8.3%	B3
American Airlines	2.24	1.00	44	1.08	1.00	92	24⅛-14	17	5.8	B3
American Broadcasting Paramount	1.78	1.30	72	1.10[1]	1.00	91	24⅞-11⅝	15	6.6	C3
American Radiator & S. S.	1.65	1.40	84	1.05	1.00	95	18⅛-10¼	14	7.1	B3
American Viscose	2.93[2]	2.00	66	1.65[2]	2.00	....	44⅝-25	29	6.8	A3
Armco Steel	6.03	3.00	49	4.59	3.00	65	65½-39⅝	45	6.6	A3
Budd Co.	1.97	1.40	71	1.91	1.40	73	21½-13⅛	14	10.0	C3
Celotex Corp.	6.43[2]	2.40	37	3.53[2]	2.40	68	38¼-23¼	30	8.0	B3
Container Corp. of Amer.	1.71	.81	46	1.36	1.00	73	20⅞-16½	18	5.5	A3
Crane Co.	4.40	2.00	45	2.75[1]	2.00	72	36¾-22	29	6.8	B3
Crown Zellerbach	3.53	1.80	51	2.66	1.80	67	58½-40⅛	46	3.9	A3
Diamond Alkali	3.83	1.57[4]	41	2.53	1.80[4]	71	57¾-29⅞	37	4.8	B3
Gillette Co.	3.40	2.25	66	2.80	2.25	80	46½-32⅛	36	6.2	B3
International Harvester	3.16[3]	2.00	63	2.88[3]	2.00	69	38¾-25⅝	29	6.8	A3
Johns-Manville	3.50	2.25	64	2.48	2.00	80	52¼-34¼	38	5.2	A3
Kennecott Copper	13.23	9.25	69	7.32	6.00	82	128½-75⅛	86	6.9	A3
Neisner Bros.	1.50	1.00	66	1.25[1]	1.00	80	14⅛-10	10	10.0	B3
Newberry (J. J.) Co.	3.18	2.00	63	2.75	2.00	73	33¾-25⅜	30	6.6	B3
Olin Mathieson Chemical	3.38	2.00	59	2.67	2.00	74	61¾-37⅛	38	5.2	B3
Paramount Pictures	4.43	2.00	45	2.85[1]	2.00	70	38⅜-28	34	5.8	B3
Phelps Dodge	8.72	4.30	49	4.48	3.00	67	63⅛-37	44	6.8	A3

1—Estimated.
2—Does not include equity in Chemstrand Corp. & Ketchikan Pulp Co., equal to $1.29 a sh. in 1956 and $2.08 in 1957.
3—Year ended Oct. 31
4—Plus stock.

RATINGS:
A—Best Grade.
B—Good Grade.
C—Speculative.
D—Unattractive.

1—Improving earning trend.
2—Sustained earning trend.
3—Lower earning trend.



Companies Active in
DYNAMIC ADVANCES IN PLASTICS

— Domestic — Foreign Developments — Competition

BY JOHN LESLIE

If a given era is named for the materials man masters in meeting the technological needs of the day, the current period of history is as likely to be stamped the plastics age as it is the atomic age, the space era, or the age of new metallurgy. For man has learned the secrets of how nature puts together such miracle materials as wood, cotton, wool, silk and rubber, and by combining such elements as carbon, hydrogen, oxygen, nitrogen, chlorine, and fluorine, has been able to produce miracle materials of his own. No one, of course, would be so wild as to write off cotton or wool, for example, as relics of an agricultural society, or to consign trees to a purely esthetic role in a future era, or to assume that plastics make it unnecessary to search out, mine, and refine metals. With our new knowledge of plastics chemistry, however, we have the means of not only duplicating the properties of many traditional materials, but of tailor-making entirely new ones with unique and highly desirable properties.

In absolute terms of production, we can hardly say we are very far into the plastics age. But the rate of growth of plastics materials has been spectacular, and recent discoveries of revolutionary scientific import promise no let-up in the dizzy climb of these synthetics as key industrial materials. In 1957, production of plastics was approximately four and one-third billion pounds, a 7 per cent gain over the previous year. This was the sixth straight year that a new high had been reached, and climaxed spectacular growth since the billion-pound mark was first exceeded in 1947 when output reached one and one-quarter billion pounds. The dollar value of the plastics industry's products in 1957 was estimated at $2.1 billion.

Mere poundage does not tell the whole story of how plastics pervade our lives today, nor indicate the increasingly diverse and important areas into which they will penetrate tomorrow. We see plastics everywhere in the home – radio and TV cabinets, floor tile, dishes, children's toys, furniture, wall paper, refrigerator and washer parts, lighting fixtures, water-based paints, garden hose, electrical plugs, telephones, sporting equipment, packaging wraps of all kinds, miscellaneous appliances. Large and growing markets for plastics are represented by cars, boats, communications equipment, clothing, displays, signs, airplanes, and countless consumer, industrial, and military products. In some of these applications, such as in boat hulls, the plastic use is obvious. In many more, such as electronic components of a complicated piece of equipment or an automobile door slide, the plastic part may not be seen, but it plays a key role in insuring long life to the product.

Another area in which the use of plastics has been spectacular, although admittedly of scant commercial significance, is medicine. Plastics are being used as replacements for such parts of the human body as blood vessels and heart valves, and are under investigation as a stomach wall support. Other plastic resins have been used in the treatment of stomach ulcers.

Certainly the choice of plastics in applications ranging from an everyday article like a toy automobile to a vital role in daring surgery bespeaks uncommon versatility of properties. This versatility arises in part from the unusual combination of qualities possessed by almost every type of plastic material we know, and in part from the great variety of "special use plastics," that the chemical industry is producing. Moreover, chemists who but a few years ago assumed that they were limited in scope by the properties of each family of plastics, have just recently discovered the means by which they can precisely design chemical structures within a

certain class of plastics to give even more closely controlled properties in the final product. This development, only now reaching commercial stature, presages a period of plastic progress that should rival the spurt ushered in by nylon.

What Are Plastics?

The properties that have won acceptance for plastics are their lightness; high strength and toughness; resistance to corrosion, and attack by fungi and insects; resistance to salt water and many chemicals; non-conductivity; transparency and colorability; and adaptability to many climatic conditions without change in strength or stability. Moreover, plastic materials can be fabricated in a variety of ways to permit production at high rates and low unit cost. Products can vary from tough, rigid industrial components to thin, flexible films. And the raw materials from which most plastics are made are readily available chemicals, many of them simple organic molecules easily obtained at low cost from petroleum or natural gas.

The chemist takes these simple molecules and causes individual ones to join with themselves or combinations to react with each other to form giant molecules, called polymers. Thus large numbers of molecules of ethylene gas, for example, are linked together (*polymerized*) into the polymer known by every housewife as the plastic polyethylene. Similarly, molecules of formaldehyde and phenol, two chemicals, are polymerized into a phenol-formaldehyde polymer, the type of plastic first introduced under the trade name, Bakelite, in recognition of its inventor, Dr. Leo Baekeland. Since many of the organic products of nature are also polymeric in structure – i.e., made up of giant molecules or chemical chains composed of countless links of identical chemical segments–it is not surprising that the chemist's synthetic creations have properties suitable for the same uses as natural polymers such as cotton, wool, cellulose, and natural rubber. In general, where the polymer is produced as a filament for weaving into fabric, it is referred to as a synthetic fiber. Where it is produced as a powder or pellets for fabrication into film or molded articles, or to be used as a resin in protective coating or adhesive formulations or the like, the polymer is normally called a plastic. This article is concerned only with plastic materials and will not cover synthetic fibers, although many are of the same chemical structure as plastics.

The two broad categories of plastic materials are thermosetting plastics and thermoplastic materials. The thermosetting group comprises those synthetics that take on a permanent shape on the application of heat and pressure; subsequent reheating does not change them. The thermoplastics soften under the influence of heat, and harden upon cooling; no matter how often the heating and cooling cycle is repeated, they never lose this property. Among the thermosetting types are the phenolics; melamine-formaldehyde; and silicones. The thermoplastics include among others vinyls, polyethylene, nylon, and cellulose acetate.

Boom in Polyethylene

Fastest growing of all plastics, and generally tabbed as the first plastic to reach the one-billion-pound-per-year mark, is polyethylene. In 1957, the Society of the Plastics Industry estimated that polyethylene grew almost 23 per cent in reaching an output of about 683 million pounds.

Far and away the biggest outlet for polyethylene is packaging, where its toughness, heat-resistance, sealability, inertness, and printability have made this transparent wrap for bananas, potatoes, apples, and other food items as common to the supermarket as trading stamps. By 1962, it is estimated that one-half billion pounds of polyethylene will go into film for food, textiles, drugs, confections, household bags and industrial packaging. Most of this will be polyethylene film alone, but a good proportion will be used in laminates with other films or as coatings on paper. Another big outlet is the well-known squeeze bottle that has helped boost the sale of cosmetics, pharmaceuticals and household and industrial products. Housewares and toys are other applications where polyethylene's ability to take it has won large markets. Because it is light in weight and easy to handle, polyethylene pipe is finding greater use in some private water systems, irrigation systems, and do-it-yourself lawn sprinkler set-ups, and should expand further in industrial piping and ducting. Already well established as an insulator suitable for such tough jobs as protecting the trans-Atlantic cable, polyethylene for electrical insulation is expected to double by 1962.

Production Figures for Plastics and Resins In 1956

MATERIALS	POUNDS	PERCENT OF CHANGE
Polyesters	94,800,000	up 30.7
Cellulosics	151,000,000	up 3.5
Polystyrene	635,400,000	up 1.1
Polyethylene	682,800,000	up 22.6
Vinyls	841,200,000	up 11.8
Urea and Melamines	308,500,000	down 2.8
Phenolics and other Tar Acid Resins	475,900,000	down 7.1

What has happened in polyethylene is what one would expect when a new industrial material catches on: everyone wants to get into the act. Where only Du Pont and Union Carbide made polyethylene plastic in this country five years ago, there are now eleven additional U. S. firms either in production or building plants. Those on the roster include Allied Chemical & Dye (a long-time polyethylene wax producer), Celanese Corporation of America, Dow Chemical, Eastman Chemical Products, W. R. Grace, Hercules Powder, Koppers, Monsanto, Phillips Chemical, Spencer Chemical and U. S. Industrial Chemicals. And Union Carbide, the largest producer, is expanding at three locations.

The New Polyethylene

More significant than the large number of new entries is the development of a new type polyethylene which accounts for much of the new capacity. The polyethylene we have been able to make up to now had the drawback of being soft and low-melting, and it required very high pressures and high tem-

peratures in manufacture. The new polyethylene, based on independent inventions in this country and in Europe, has greater stiffness and greater resistance to heat, and it is made at low pressures. This low-pressure polyethylene also has improved resistance to moisture transmission and to attack by solvents and greater strength than conventional high-pressure polyethylene. Because of these properties, applications that can be opened up include containers (including nursing bottles, milk bottles, soft drink bottles, etc.) which must be sterilized; pipe than can take higher temperatures and pressures; packaging impermeable to moisture; and a variety of molded industrial and consumer items beyond the range of the conventional polyethylene.

The new polyethylene is the first commercial example of a profound discovery by polymer chemists that simple hydrocarbons like ethylene can be polymerized into long, precisely ordered chains. Prior to this, chemists could link the constituent molecules of a plastic together only in an unordered, random manner. Keys to making precisely designed molecular chains are new types of catalysts – chemicals which cause a reaction to proceed – discovered by the German professor Karl Ziegler, Italian chemist Guilio Natta, and chemists in such U. S. companies as Phillips, Standard Oil of Indiana, and Du Pont.

With these new catalysts, ordered chains of other plastics are also possible. Already Hercules Powder in this country, Farbwerke Hoechst in Germany, and Montecatini in Italy have applied the technique to manufacture a new thermoplastic, polypropylene. Made from the petroleum hydrocarbon propylene, this is claimed to have a wider range of properties than any plastic yet produced. Another new product which is a highly ordered linear type is Du Pont's Delrin, made from formaldehyde. It differs from polyethylene and polypropylene chemically, and in properties resembles nylon. Chemists are also taking a second long look at a whole group of commercial plastics to see how the new catalysts can improve their properties. These new techniques, moreover, have been used by such companies as Firestone Tire and Goodrich-Gulf to develop a truly synthetic "natural" rubber, a century-old dream of chemists.

Synthetic Plastics and Resin Materials

United States Tariff Commission

YEAR	PRODUCTION Pounds	Tons
1922	5,944,133	2,972
1930	30,867,752	15,433
1935	95,133,384	47,566
1940	276,814,363	138,407
1945	818,020,000	409,010
1950	2,150,518,000	1,075,259
1951	2,431,408,000	1,215,704
1952	2,333,924,000	1,166,962
1953	2,776,627,000	1,388,313
1954	2,827,803,000	1,413,901
1955	3,738,916,000	1,869,458
1956	3,977,000,000	1,988,500
*1957	4,387,000,000	2,193,500

*—Revised estimate by THE SOCIETY OF THE PLASTICS INDUSTRY, INC.

Old Standbys Move Ahead

Although overshadowed by the progress in polyethylene and polypropylene, the other thermoplastics that have become household words have not stood still. Of these, vinyl—the largest volume plastic—and polystyrene still lead polyethylene in production, and are attracting new producers and uses.

The biggest vinyl, polyvinyl chloride (PVC) goes into such every day products as garden hose, phonograph records, shower curtains, floor tiles, among others. Supplying and developing these burgeoning markets are such large companies as Union Carbide, Goodrich, Dow, Monsanto, Allied Chemical, U. S. Rubber, Diamond Alkali, Firestone and Borden.

Next to PVC, but considerably smaller in volume, is polyvinyl acetate. This is produced by such companies as Air Reduction, Carbide, Borden, Du Pont, Celanese, Shawinigan Chemicals, W. R. Grace, Monsanto and National Starch Products for use in paper and textile treatments, as adhesives, and in the rapidly growing outlet of water-based paints. Other vinyls include polyvinylidine chloride which is known under principal producer Dow's Saran name as a film for packaging, and as an upholstery and screening material.

To improve the strength of the straight polystyrene, producers have developed a combination of polystyrene and rubber which can be easily formed into tough parts such as refrigerator doors, trays, panels and the like. They have also modified the plastic chemically to widen its suitability for such uses as shoe soles and mechanical goods. In the paint field, styrene-butadiene copolymers led the waterbase (or latex) paint development and are still the dominant material in the field. Current efforts are directed toward development of a high-impact styrene material which is transparent. Though it does not match the growth rate of polyethylene or the vinyls, at 635 million pounds a year, polystyrene is still good business for such producers as Union Carbide, Catalin Corp., Dow, Goodyear, Koppers and Monsanto.

Other "Old" Plastics

Nylon is an old plastic, at least "old" in terms of today's industry. But here action is dynamic as new chemical types of nylon have been introduced and new companies have joined Du Pont, the pioneer producer. One new nylon, called nylon-6, has been widely used in Europe, and is now being made in this country by Allied Chemical, Spencer Chemical and Foster Grant. Du Pont, producer of the original nylon-66, has also added another product, and still other types (modified "66", "11") are being imported. It will surprise many to learn that nylon, so well known to the public as a textile fiber, is a tough, durable, self-lubricating plastic for such jobs as gears, bushings, and mechanical parts requiring extreme ruggedness; cable jacketing; bearings; marine hardware; and electrical equipment.

Acrylics are another class of plastic well known to the public—as Plexiglas (Rohm & Haas) for such a variety of uses as aircraft canopies, automobile tail lights, and bathroom fixtures. As is evident from uses of acrylics, the principal property utilized is their light transmission. Principal acrylic producers, Rohm & Haas and Du Pont, are being joined by at least one newcomer, Hawthorne Chemical, a joint company of Hercules Powder and Imperial Chemicals Industries.

The incorporation (*Please turn to page* 46)

Inside Washington

By "VERITAS"

STATISTICS on the nation's unemployed unfortunately trail the facts by one full month and the 5.2 million recorded as jobless as of mid-February necessarily reflected a month-old condition. Whether the trend has been up, or down, cannot be determined on the basis of spot checks. Congress, therefore, must find solutions somewhat in a vacuum and there is sentiment on Capitol Hill in favor of drafting a tax reduction bill, but withholding action at least until the March job figures are in. That is agreeable to the White House. Ike's advisers see little point in cutting income taxes for persons who have no income; or a reduced one, or for business houses which are having no difficulty remaining out of the higher level brackets.

CRASH PROGRAM of public works likewise is losing support. When the idea of new post offices and federal court houses in every part of the country first was broached, it seemed like an ideal way to get money in circulation, men on payrolls. But Washington wasn't prepared to "crash"; it has very few projects on the drafting tables, very few sites under option. If it were apprehended that the recession might be a long one, such a program might get into full swing in time to prevent a crash. Few members of Congress believe recovery will come as fast, and as completely as Ike envisions it. Fewer still see real depression ahead.

PLANNING for a tax reduction will bring to the surface some good, and some bad, ideas. Vice President Nixon's views are interesting. What Nixon says may be taken to reflect, also, the ideas of the President. The second-in-command man believes acceleration of defense spending and the improvement expected in the Spring will be sufficient to reject the idea of works programs that wouldn't be considered in normal times. But he sees signs of a tax cut too: a tax reduction taking into consideration that consumer spending is off only 1 per cent from a year ago, while business investment has declined sharply. Recognizing those facts, Nixon feels that a tax reduction, if one comes, should stimulate business investment.

EXPANDED job opportunities and production that would have the effect of dropping consumer prices would flow from a tax program that looks to the economic health of the Nation rather than merely to the likelihood of credit to a political party, to be squared at the polls. Excise tax cuts will be favored by both parties because they would be immediately reflected in the prices of many items that are moving too slowly, thereby benefiting producers, middlemen, and consumers.

WASHINGTON SEES:

Demands within Congress and from the outside that current economic ills be dramatically and immediately cured, overlook the fact that recessions neither come overnight nor are they cured overnight. There is no miracle drug, no cure-all.

There is as much danger of too much "medication" as too little. An overdose of remedies can awaken the latent tendency to reinflation. Because the White House hasn't promptly adopted and made operative each recovery scheme, criticism is heard. The Administration is accused of being smug about it all. The facts belie that. The recession is not going unchallenged by affirmative action.

Interest rate reduction by the Federal Reserve Board is bound to have much psychological and some practical results. The Defense Department has announced plans to let $10 billion in contracts by the end of this fiscal year — in about three months. That compares with $6 billion in the last six months of 1947. The Administration has lent itself to speedup in public building, works, highway, and reclamation spending.

Congress cannot be fairly accused of dragging its feet. It has given the go-ahead to new housing, to public works, and to military programs. Unemployment benefits will help tide the jobless over an increased number of months. Tax reductions are in abeyance, and if found advisable can be invoked without protracted hearings or time-slaying floor debate.

As We Go To Press

▶ When General Electric gave up on "fair merchandising with resale prices fixed by the manufacturer, an almost fatal blow was struck to the system. But the method was a long time coming into existence, and it will be a long time going. When Westinghouse Electric Corp. dropped "fair trade" deals in 1955 it was certain that GE would follow in due time. Statutes now are on the books of 32 states, allowing a manufacturer to force all his retail outlets to observe minimum resale agreements concluded with any one of them. That doesn't tell the whole story: in 11 of those states, courts have held that retailers are not bound, their signatures on the dotted line notwithstanding. And interstate mail order business had a diluting effect on the laws.

▶ Several states and the District of Columbia never had "fair trade" acts. Nebraska and Virginia tried the system, then abolished it. However, much of the drug, hardware, cosmetic and tobacco trade still is covered by the minimum price agreements. Producers, especially the pharmaceutical houses, observing the disintegration on the state level, are pushing for a Federal "fair trade" law. Today's price market is an extremely active one and merchandisers will welcome the shift, especially those operating near the state line where a restriction bars them, doesn't bar a segment of their competition.

▶ The outlook for legislation in the labor area is becoming more confused. The haul and pull of pressure politics adds to the confusion. The uncertain economic outlook has drawn attention away from the subject, at least for the present. A wage-hour bill rewrite has been pending for one full year, the testimony is in on the Senate subcommittee level -- and there it is likely to remain. The move for a Federal code of ethical practice by unions has bogged down. Congress members who had hoped for a far-reaching "clean union" bill find themselves butting a wall of indifference and compromise. With the leaders of both parties skilfully dodging, the outlook grows hopeless.

▶ Senator Barry Goldwater, republican member of the McClellan Committee and candidate for re-election, locked horns with Walter Reuther, then found himself going it alone. The full bankroll of unionism will be pitted against Goldwater's re-election, as a "lesson" to others who frown on labor's over-reaching and corruption. Goldwater wants management and labor placed on a basis of equality at the collective bargaining table, and on questions of enforcibility of contracts. The Arizonan also asks that unions be subject to antitrust action. The union bankroll wasn't enough when it was dumped into Ohio to defeat Robert A. Taft. It could be a different story in the Arizona election.

▶ Current interpretation of the Renegotiation Act and restrictive payment policies of the Defense Department are creating a critical financing problem for the aircraft and missile industries. The speedup of procurement which is one phase of President Eisenhower's assault on the economic lapse might aggravate the situation by increasing the backlog of undetermined audits, and the undertainty as to what a contractor may consider funds applicable for expansion, or dividends. The Renegotiation Board is an agency independent of the Department of Defense. But it is armed with broad powers to determine unilaterally just how much an industry should earn on defense contracts. Or how little!

▶ The military services are demanding that the industry step up privately-financed research and development. Also demanded is a larger share of capital needed for production, and substantially more of the working funds necessary during the expensive, lengthy time period from development to product delivery, runs the protest. Meanwhile

these demands run head-on into the present policies of the Renegotiation Board. The Board doesn't award any contracts. The services, through their procurement agents, have established incentive-type contracts under which target costs are established; if reduced, the contractor is permitted to retain a percentage of the difference -- usually 20 percent on the first production runs. On the other hand, there are financial penalties for running over target prices.

▶ Under current practice, as long as four years after work has been performed on the contracts, the Renegotiation Board enters the picture. Applying its rigid procedures, the profits earned as a result of savings under an incentive-type contract are reclaimed from the contractor. They have been labeled, in the interim, "excessive profits." Said the Aircraft Industries Association of America: "At a time when unprecedented demands are being made to achieve a clear-cut technological lead over the Russians, an industry's financial capability cannot be increased by draining its financial resources."

▶ The separation of powers theory at times becomes blurry. Never more so than in two current situations: the FCC investigation, and the drive against Agriculture Secretary Ezra Taft Benson. President Eisenhower appointed both men. The Congress has forced the resignation of a member of one of them, and is determined to legislate the other out of his Cabinet functions even though, as seems certain now, he remains on the job as Secretary. Some may complain that the separation of powers has been vetoed; others will point out that the equally important principle of government by checks and balances has been brought into play.

▶ Congress has power to investigate the agencies staffed by Presidential appointment. The Federal Communications Commission is one of these, and Richard A. Mack was a Commissioner by White House selection. When it became evident that he had outlived his effective usefulness, the House Committee on Legislative Oversight concluded Mr. Eisenhower would not fire Mack (an inference which it now appears was in error) so it threatened him with impeachment. In spite of the fact that impeachment proceedings have been launched little more than a dozen times in history and 75 percent of them didn't end in firings, Mack wisely bowed, resigned.

▶ Next, members of the congressional farm bloc, failing in efforts to squeeze Secretary Benson out of his job, embarked on a legislative strategem: passing laws that would force him to administer farm policy according to their dictates, not his own program as indorsed by the White House. The Senate Agriculture Committee started it with approval of legislation that would prohibit Mr. Benson from lowering price supports and planting allotments below last year's levels. The House Agriculture subcommittee, on the same day, voted unanimously for a bill that would prevent the Secretary from reducing dairy price supports. One circumstance operates in Benson's favor: he is acting under current legislation; substitute laws would be subject to Presidential veto and the two-thirds vote necessary to override may not be available.

▶ Defense contractors who use Federally-owned property may find new state and local taxes adding to the cost of executing their agreements. The Supreme Court of the United States, with two dissenters, ruled it is legal to tax Federal property and implements in the hands of private contractors and used in a business conducted for profit. The Court then went on to rule that Detroit and Wayne County properly collected ad valorem taxes on Federal property from a subcontractor because he used that property in building military planes.

▶ The Justices agreed among themselves that a state cannot levy a tax against the Government of the United States unless Congress makes a special exception as to described property. In the Michigan cases, the jurists strode around this principle to regard the imposition as a charge against the privilege of using or possessing the property. This appears to suggest to states and cities that they apply "use" taxes to the millions of dollars worth of Federally-owned equipment used by private companies. In fact, Justice Hugo L. Black went so far as to suggest the statutory construction for state statutes which would turn the trick.

THE IRAQ-JORDAN FEDERATION

—Upset Nasser's Dream of Empire

—Political-economic significance of new factor in the Middle East for the Semitic peoples—including Israel.

BY JOHN METCALF

The struggle for control of the Arab World is mounting in intensity. On one side is the Soviet-backed Republic of Egypt, Syria, and Yemen under Colonel Nasser's leadership. Opposing the Egyptian dictator is the Western-supported Arab Federation of Iraq and Jordan. King Saud of Saudi Arabia is also in the anti-Nasser camp, but for the present prefers to play an independent role. On the other flank is President Bourguiba of Tunisia, another friend of the West, who hopes to block Nasser by creating a North African federation.

It has become obvious that Nasser's dream of Empire stretches far beyond the Middle East. He has reached out to the shores of the Atlantic by encouraging rebellion in North Africa. He has made territorial claims southward into the African heartland of the Sudan. His influence extends eastward to the sheikdoms of the Persian Gulf. At first glance it would seem that Nasser's efforts have been amazingly successful. But in actuality his demagogy has built a house of cards. Specious promises have enflamed mob passions, but economic reality is sadly lacking. What we see is the age-old response of the "have-nots" wanting to share their neighbor's good fortune rather than toil to create their own.

The principal barrier to Nasser's expansion is now the Iraqi-Jordanian federation. To strengthen this fledgling alliance, Iraq's elder statesman Nuri as-Said has been recalled to Premiership. One of the most astute political leaders in the Middle East, Nuri has been active in his country's affairs ever since it emerged as a separate state after World War I. A life-long friend of the West, he lead Iraq into the Baghdad Pact in 1955. He saw in this alliance the best means of preserving Arab independence and thwarting Russia's Middle East ambitions.

Both Iraq and Jordan were created after World War I from fragments of the Ottoman Empire. Initially under British mandate, Iraq obtained full independence in 1932 and Jordan in 1948. The British installed as rulers two sons of Hussein al Hashimi, Sherif of the Holy City of Mecca, to whom they were indebted for wartime assistance against the Turks. Sherif Hussein, who claimed descent

Selected Economic Indicators

	EGYPT	SYRIA	IRAQ	JORDAN
Population (1957)	23,884,000	4,340,000	6,538,000	1,470,000
Total Area (sq. miles)	386,000	70,000	172,000	37,000
Agricultural Area (sq. miles)	10,100	15,850	21,100	3,450
Agr. Area as % of Total	2½%	23%	12%	9%
Population per Sq. Mile	62	62	38	40
Pop. per Sq. Mile Agr. Area	2,365	274	310	426
Total Trade (1957—Mil. $)	1,017	304	700	100
Oil Output (1957—Mil. bbls)	15	0	161	0
Highway Mileage (paved)	1,300	2,360	1,400	900
Motor Vehicles (1955)	95,000	20,000	33,000	6,000
Railroad Mileage	4,200	530	1,050	230
Railroad Locomotives (1955)	1,052	147	130	15
Per Capita Income (estimate)	$100	$125	$125	$50

from the Prophet Mohammed, was subsequently driven out of Arabia by Ibn Saud, father of the present King Saud. This explains the coolness that long existed between the Hashemite dynasties of Iraq & Jordan and the Saudi Arabs.

In Pursuit of Arab Unity

The concept of Arab Unity has been a powerful recurring theme ever since the Middle East was freed from the Turkish yoke. But in its exposition harmony has been lacking because of two conflicting motifs. Iraq and Jordan have envisioned restoration of a "Greater Syria" under Hashemite rule comprising most of that area known in ancient times as the Fertile Crescent. Egypt, on the other hand, has long dreamed of re-establishing Cairo as the center of the Arab world as it was in the 15th century.

Formation of the Arab League in 1945 with headquarters in Cairo was widely regarded as an important step toward Arab Unity. But the only real agreement its seven members ever achieved was the negative one of opposition to Israel. Egypt viewed proposals for a "Greater Syria" as a threat to its own leadership. Saudi Arabia tended to support Egypt lest too much power redound to its Hashemite rivals. And the Syrian merchant class was reluctant to come under anyone's domination.

But Colonel Nasser's meteoric rise to prominence was viewed with alarm by Saudi Arabia which imagines itself as holding the balance of power in the Middle East. Behind-the-scenes diplomacy healed the breach with Hashemite Iraq and Jordan, now ruled by the great-grandsons of Sherif Hussein.

Nasser's scheme for a *United Arab Republic* originally included both Syria and Jordan. This would have given him a more compact grouping and a chance to squeeze Israel from three sides. But Jordan's young King Hussein took the initiative in proposing a rival *Arab Federation* to Iraq and Saudi Arabia. His cousin King Faisal of Iraq was agreeable, since with more than four times the area and population of Jordan, plus agricultural land to spare and oil wealth, Iraq had no fear of Jordanian domination. King Saud, on the other hand, although sympathetic to the plan, did not want to give up his independence.

Iraq Twice Blessed

Iraq is fortunate in having the best economic potential in the Middle East. It has abundant resources of water and cultivable land, a combination unique in that part of the world. On top of this it has fabulous wealth in oil, the black gold used to finance the country's ambitious development program.

Iraq's geographic unity derives from its great alluvial plain nestled between the Tigris and Euphrates rivers. This land is the legendary birthplace of civilization—site of the Garden of Eden. It is thought to have sustained a population of 20 million in ancient Babylonian times with the help of a complex irrigation system that silted up centuries ago. The soil is rich, but rainfall is generally inadequate for agriculture, for torrential floods caused by melting of mountain snow in the north occur each spring. Unfortunately, most of the runoff escapes into the Persian Gulf, coming too late to help winter grain and too early to benefit summer crops.

Modern Iraq has a population of only 6½ million. Of a total land area larger than California, only an eighth is now cultivated, and about half of this lies fallow each year. Poor water distribution and primitive farming have kept crop yields at low levels, but even so the country is self-sufficient in food production and exports 80% of the world's date supply. But the majority of Iraq's farmers are idle much of the year since they raise only winter crops. The major irrigation works now under construction or planned will make possible great increases in farm yields and income.

Oil, of course, is the key to Iraq's development. The great Kirkuk oil field in northern Iraq, discovered in 1927, is one of the richest in the world. It currently supplies about three-fifths of Iraq's 615,000 barrels daily of crude oil production. The remainder comes from two new fields brought into production since World War II; one in southern Iraq near Basrah, a short distance from the Persian Gulf; the other 120 miles northwest of Kirkuk in the Mosul region. The limiting factor on oil

IRAQ: Oil Statistics

	1950	1953	1955	1956	1957
Oil Production:					
Annual (Mil. bbls)	50	210	247	232	161
Daily Av. (Thous. bbls)	136	576	675	633	440
Daily per well in Iraq	n.a.	8,340	7,670	6,950	5,870
Daily per well in USA	12	13	13	13	13
Proven Reserves:					
Iraq. (Mil. bbls)	5,250	13,000	14,500	22,000	25,000
As % of Mid. East	15	17	16	15	15
As % of World	7	10	10	10	10
Direct Oil Revenue to Gov.:					
Millions of Dollars	$ 14	$140	$206	$192	$137

n.a.—Not available.

production in the landlocked Kirkuk and Mosul fields is pipeline capacity across Syria to the eastern Mediterranean seaboard, a distance of 534 miles.

The danger of over-reliance on pipelines was vividly shown during the Suez Crisis when Syrian sabotage forced a shutdown of Kirkuk oil production for nearly five months. But now the flow of oil across Syria is almost completely restored, and previous plans for construction of new trans-Syrian facilities have been shelved. For a while last year there was enthusiastic talk of building a 600-mile pipeline to the north across Turkey that would bypass Syria and reach the Mediterranean at Iskenderon. But the plan appears to have foundered on the cold reality of gambling $250 million against any subsequent change in Middle East alignments.

Large scale oil production did not actually get under way in Iraq until after World War II. Until 1951, when the 50-50 profit sharing agreement with the Iraq Petroleum Company (I.P.C.) became effective, the Iraq Government was chronically short of funds and could do little to promote the country's economic development. But with Free World oil consumption growing at a rapid pace, and Iranian oil temporarily shutoff from foreign markets by Dr. Moussadeq's intransigence, I.P.C. was able to raise Iraq's oil production to 675,000 barrels daily by 1955, a five-fold increase in only five years time. Another factor contributing to this striking gain was the broad international ownership of I.P.C. which facilitated world-wide marketing (British Petroleum, Royal Dutch Shell, Companie Francaise des Petroles, Standard Oil of New Jersey, and Socony-Mobil).

This partnership in oil has been a beneficial one for Iraq. More than one-third of Iraq's national income and about three-fourths of government revenue is now derived from oil production. In five years the Iraq Government's direct income from oil rose from the pound sterling equivalent of $14 million to more than $200 million, with another $60 million of indirect revenue. There was a one-third drop in oil income in 1957 because of the Suez situation, but revenue should be restored this year. Iraq's proven crude oil reserves are placed at 25 billion barrels, roughly 10% of the world's total.

Preparing for the Future

Iraq is determined to use its new wealth wisely. Since 1951 70% of oil income has been allocated to Iraq's Development Board for investment in the country's economy, so that in general it can be said that the Board has spent its money wisely, seeking expert advice as needed. Since public works projects take time to blueprint, it has also accumulated a substantial surplus of cash.

Under Iraq's current 6-Year Plan (1955-60) more than $1.3 billion is scheduled for investment. Major emphasis is on taming Iraq's two great rivers, the Tigris and Euphrates, which for centuries have subjected the northern part of the country to annual floods and turned much of low-lying southern Iraq into a swamp. In addition to flood control, irrigation, and drainage projects, large sums are being spent on transportation, public buildings, and the expansion of industry and electric power.

The American firm of Arthur D. Little, Inc., economic consultants, has been engaged to advise on industrialization. The aim is not to seek self-sufficiency at any cost, but instead to create enterprises using local raw materials and able to meet foreign competition in the home market. Although most of the new industries are state owned, more attention is now being given to encouraging private enterprise, and foreign investors are being offered liberal tax concessions and other incentives.

In 1955 an oil refinery was completed near Baghdad making the country self-sufficient in petroleum products; and near Mosul a new asphalt plant began operating in 1956 to provide material for road paving. The cement industry has been expanded to meet the needs created by booming construction activity, and in 1957 even a small export surplus was attained. A $6 million plant near Kirkuk will extract sulphur from natural gas now being wasted. Plans have been made for the manufacture of petro-chemicals, plastics, and fertilizer. Under way are surveys of the country's mineral wealth, including iron ore, copper, and gypsum. Additional electric power capacity is being rushed to completion. The textile industry (using domestic cotton and wool) has been expanded; a paper mill using marsh reeds is under construction, as well as efforts to increase sugar production and refining.

The heightened tempo of economic activity in Iraq has created new opportunities for American businessmen. U. S. engineering and construction firms are submitting bids on large public works projects. Trade between the two countries has grown, and the U. S. is one of the principal suppliers to the Iraq market, especially for (*Please turn to page* 54)

U.S. Trade With Iraq & Jordan

(Millions of Dollars)

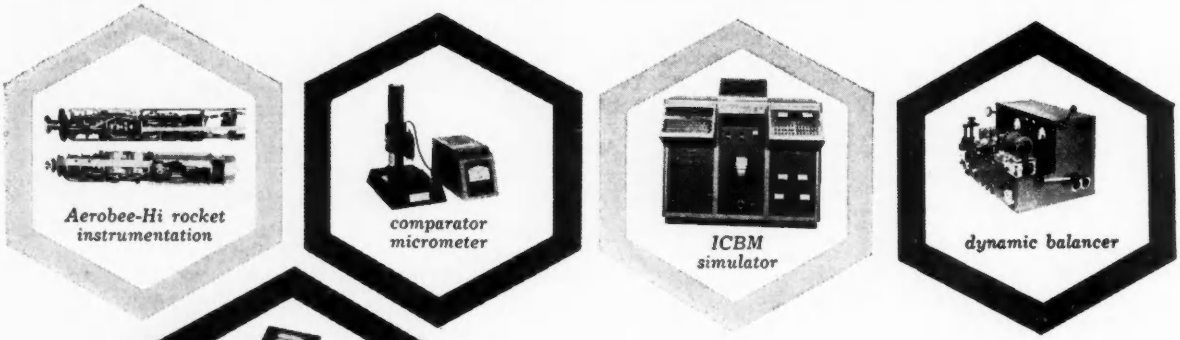
	1950	1954	1955	1956
U.S. Exports to Iraq:				
Machinery	1	10	13	16
Automobiles	1	10	12	9
Textiles	2	3	3	3
Other	4	5	6	8
	8	28	34	36
U.S. Exports to Jordan	1.0	3.5	6.3	4.7

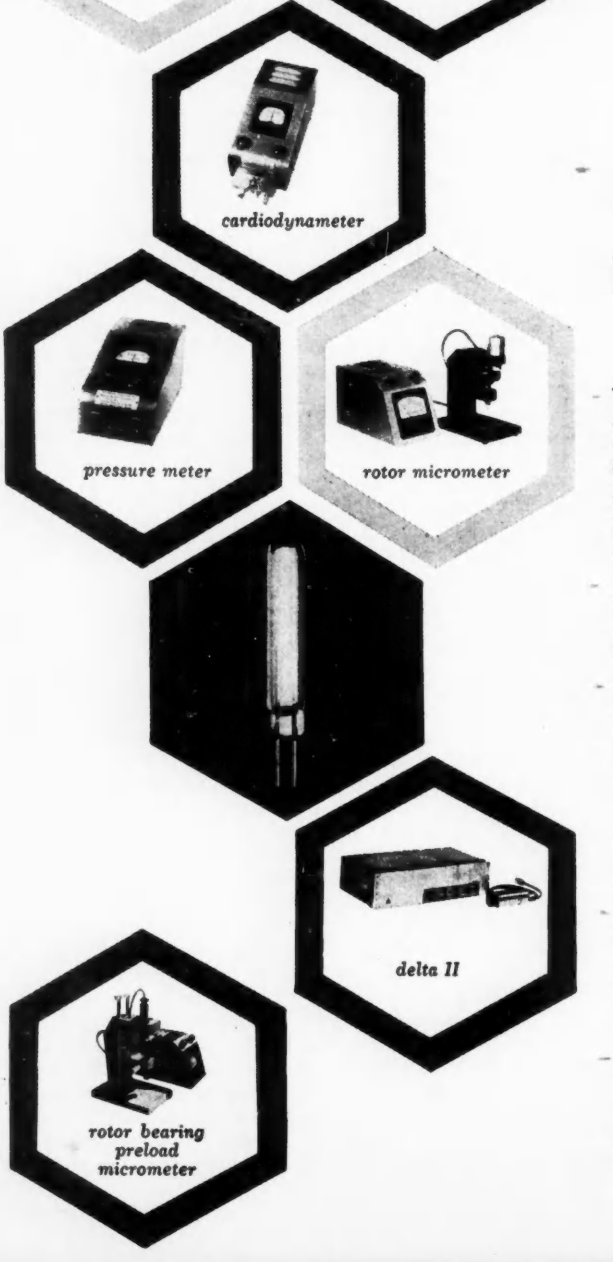
	1950	1954	1955	1956
U.S. Imports from Iraq:				
Petroleum	0	5	18	25
Raw Wool	6	6	9	10
Dates	3	4	2	3
Other	2	1	3	2
	11	16	32	40
U.S. Imports from Jordan	*	*	*	*

*—Less than $100,000.

No. 2 - Of Our Special Studies Of Major Industries

Mixed Prospects for the ELECTRONICS INDUSTRY





1958 OUTLOOK for Makers of Electronic DEVICES and CONTROLS

PART 1 - BY HAROLD M. EDELSTEIN

IN THE fifty years since Lee de Forrest invented the vacuum tube and fathered electronics, the field has grown to where it can now be measured as the fifth largest American industry. Where it will go in the next fifty years is impossible to say, but if the history of the last few years is any indication, the horizons are as unlimited today as they were in 1907.

For all its magic and virility however, electronics is not an industry in the accepted sense of the word, despite the fact that such giants as GE, IBM, Westinghouse, RCA and Zenith have risen to prominence in developing the new field. In actuality, it is a science—or a special technology—that has given birth to several new industries, including radio and television, and has been put to use across broad industrial boundaries as an important and frequently indispensable tool.

But if measured as an industry, as so many do, figures can be used to show the enormous scope of electronics as a growing force in a wide range of military, industrial and commercial activities. Grouping them all together, electronics commanded over $12 billion in business last year, of which $7 billion were actual factory sales. By contrast, factory sales just ten years earlier were only $500 million, and in 1956 they totaled $5.9 billion, a full billion less than the most recent figures.

Measured in other ways, the impact of electronics throughout the economy is best testified to by the 1.5 million people now employed in all segments of the field and the fact that approximately 100,000 out of the nation's total of 500,000 engineers are engaged in some phase of electronics work. Along

Leading Companies Making Industrial Devices and Controls

	Earnings Per Share			Dividends Per Share			Recent	Div.	Price Range
	1955	1956	1957	1955	1956	1957*	Price	Yield	1957-58
American Bosch Arma Corp.	$2.41	$2.55	$2.90	$1.00[4]	$1.00[4]	$1.20	21	5.7%	27 -16⅛
American Chain & Cable	5.75	6.80	6.00[1]	2.50	2.50[4]	2.50[4]	43	5.8	64¼-38⅜
American Machine & Metals	4.96	5.83	6.36	2.45	2.60	2.80	53	5.2	58¾-41
Avco Mfg. Corp.	.05	[d]1.84	1.38	.20	......	.10	6	1.6	7¾- 4⅞
Beckman Instruments, Inc.	1.06	1.36	.16	......	3%[5]	3%[5]	22	....	47¾-20¼
Bendix Aviation	5.66	5.04	5.44	2.10	2.40[4]	2.40	49	4.8	66¾-42
Consolidated Electrodynamics	.73	1.35	.73	.40	.50	.40	31	1.2	54¾-25⅛
Daystrom, Inc.	2.01	2.77	2.80[1]	1.20	1.20	1.20	33	3.6	47 -27½
Dynamics Corp. of Amer.	.61	.54	.45[1]	.40	.40	.20[6]	4	....	7⅜- 2½
General Electric	2.40	2.46	2.84	1.60	2.00	2.00	62	3.2	72⅜-52⅜
General Precision Equipment	2.05	1.63	3.03	2.40	2.40	2.40	38	6.3	47¼-30¼
International Tel. & Tel.	3.21	3.92	3.30[1]	1.20	1.70	1.80	32	5.6	37¾-25¾
Minneapolis-Honeywell Reg.	2.99	3.40	3.07	1.50	1.75	1.75	85	2.0	131 -73½
Raytheon Mfg.	.45[3]	.23[2]	1.70	5%[5]	......	......	22	....	24⅝-16⅜
Robertshaw-Fulton Controls	2.51	2.82	2.60[1]	1.50	1.50	1.50	24	6.2	36½-20⅞
Servo Corp. of Amer.	.55	.41	.25[1]	.05	.20	.15[7]	5	....	8 - 3¾
Servomechanisms, Inc.	.58	.81	.46	.40	.40	.40	8	5.0	12⅝- 6⅛
Square "D" Co.	1.65	2.28	1.74	.83	1.03	1.00[4]	24	4.1	35¾-19⅛
Texas Instruments, Inc.	.50	.72	1.10	......	......	......	29	....	31½-15⅞
Westinghouse Air Brake	2.98	2.86	2.89	1.20	1.20	1.20	21	5.7	33⅛-17½
Westinghouse Electric	2.46	.10	4.18	2.00	2.00	2.00	63	3.1	68⅝-52⅜

*—Or latest 1958 div. rate.
[d]—Deficit.
[1]—Estimated.
[2]—7 months ended Dec. 31.
[3]—Year ended May 31 of following year—adjusted.
[4]—Plus stock.
[5]—Paid in stock.
[6]—Directors 9/10/57 omitted div.
[7]—Directors 11/19/57 omitted div.

American Bosch-Arma Corp.: An auto equipment producer which now is an important electronics manufacturer, earnings have improved in each of the last several years. Heavy backlog and high net in 1957 should be followed by further gains in 1958.

American Chain & Cable: Diversification into automation has improved company's position, but slowdown in other lines depressed 1957 earnings. Growth of electronics lines should make 1958 a satisfactory year.

American Machine & Metals: Derives over a third of its income from instruments and gauges used in a number of important industries. Sales have trended upward and efficient operations have led to excellent earnings. Results in 1958 should not vary much from the $6.36 earned in 1957.

Avco Manufacturing: Company operates in several defense industries, but its record is one of chronic instability. Costs are now under better control than heretofore, but earnings prospects are only fair.

Beckman Instruments: Profit margins will probably remain under pressure for this major instrument maker. Longer term prospects are better, however.

Bendix Aviation: This large, well diversified producer has an excellent record, but changes in defense procurement may set sales and earnings back temporarily in the year ahead. Defense business accounts for 70 per cent of company's revenues.

Consolidated Electrodynamics: A fast growing producer of special electronic equipment, earnings growth is slowing down under heavy research pressures. Nevertheless, company has well established itself as a leader.

Daystrom: Has completed its changeover, and is now principally an electronic and electrical equipment maker. Recent earnings have been off slightly and heavy expenses should cut further into results next year. Expanding activity in nuclear energy and civilian lines hold longer term appeal.

General Electric: Giant of the industry, GE's efficient operations and dominance in many profitable fields indicates further earnings advances in the year ahead.

General Precision Equipment: A holding company in electronic and instrument fields, company has made a good earnings comeback. 1958 should provide a good test of company's newly gained position.

International Tel. & Tel.: Worldwide interest in electronics, and company's excellent position overseas should lead to long term gains. However, only small earnings improvement seems probable immediately.

Raytheon: Since elimination of radio and television lines, and concentration in missiles and electronics, results have been excellent. 1957 performance indicates likely improvement in 1958.

Robertshaw-Fulton Controls: Company's military electronics business is growing fast, and electronics instrument business is good, but poor market for appliance controls retards earnings. Lower earnings expected in 1958.

Servomechanisms, Inc.: Competitive conditions have cut profits for this small maker of electromechanical controls. Poor outlook for year ahead makes dividend resumption improbable.

Square "D" Co.: Most of company's output is of electrical control equipment for industrial use. Future is clouded by slowdown in capital spending and new plant construction.

Westinghouse Airbrake: Company has diversified widely, reducing reliance on rail equipment business. Electronics business growing but weakness in construction and rail equipment lines may hurt earnings.

with chemistry and missiles it commands by far the largest portion of all research and development expenditures for both military and industrial purposes.

But despite the enormous role electronics is now playing in all walks of life, it is not an industry—and in recognition of this fact the Magazine of Wall Street early adopted the policy of breaking the field down into three separate categories: devices and controls, computing machines and radio and television. In doing so, we are able to segregate the potential of three important industrial classifications that in essence owe their very existence to the science of electronics. In this first section we will deal with "devices and controls", and elsewhere in this issue are separate studies on the other two groups.

Devices and Controls

Military procurement today dominates most electronic fields—except for commercial radio and television — with its greatest interest centered in the broad classification "devices and controls." The reason is not difficult to discern since electronics is vital to both nuclear energy and guided missiles, the two fields that attract most of the attention of military thinkers and planners these days.

So big is the military role, that General Electric recently estimated defense electronics procurement spending at over $4.2 billion in 1958, or 25 per cent of all Defense Department expenditures for major procurement, production items and research. As re-

cently as 1951, the Defense Department's total outlays for electronics devices was only $747 million. Yet so rapidly has the pace of electronics spending been stepped up that RCA predicts these outlays will rise five times as fast as total defense expenditures over the next several years.

In all, defense items account for over 50 per cent of all electronics business, while the balance is spread among radio and television (25%), industrial products (18%) and the rest on replacement parts. Under these circumstances it is self evident that virtually every producer of electronic devices is dependent in some degree on government orders—a factor that has spurred tremendous technological advance, but has also held back profits growth for many firms, since profit margins are usually low on defense business.

Industrial Products

For the manufacturers, however, this is not necessarily an unhappy situation over the long term, since most military developments of this kind can be adopted for vital civilian uses. One excellent example is that of radar. Developed during World War II for numerous purposes such as navigation and range-finding, it is today the principal navigational tool of the world's commercial airlines, allowing them to fly in fair weather and foul. Moreover, modifications have led to the perfection of ground control systems that enable planes to land under the densest fog conditions.

More important however, has been the fillip military research has given to automation, the one field with the most enormous industrial potential – for virtually every electronic gadget can be adapted to non-military purposes. Essentially, of course, there is no difference between military and industrial automation, except in the ends to be gained. The computer programmed to keep a missile on its course can also be directed to perform an industrial operation. The servomechanisms that automatically move internal parts of an aircraft or missile can do the same in non-military fields, and the sensitive mechanisms that comprise a missile's guidance system can also be used to attain the minute tolerances industrial work in the missile age requires.

Thus defense production is serving as a developmental proving ground for the industry of tomorrow, and as long as the major share of the research costs can be borne by the government, most producers are not too concerned about their future.

That a large industrial market for electronic equipment looms on the horizon is a foregone conclusion. Automation offers too many cost, quality and time-savings advantages to be put off for too long, but in the present state of the economy it appears that a temporary slowdown in industry's progress along the automated trail is in the offing. Many companies are finding the initial costs of installation, and the lost production due to methods changeover too expensive to be borne at a time when sales are harder to make and profits are being squeezed.

Influence on Capital Spending

The slowdown is, of course, part and parcel of the general letdown in capital spending that is currently plaguing business activity. But how much of a part spending on electronic devices played in the recent past, and how much it will play in the future can be placed in perspective.

In just the last ten years, automation has proceeded so far that four out of every five persons employed in America's metalworking industries work in plants that are at least partially automated. Across a broad range of machinery and parts producers from office machine makers through agricultural, automotive, aircraft, rail, shipbuilding and other producers, almost 70 per cent of the companies employing more than 1000 workers, have automation well entrenched in their operations. Despite the current recession, it is expected to continue to spread out fast enough in all fields that Cooper-Bessemer, in establishing a new Electronics-Controls Division recently, predicted that within 10 years all of the nation's power plants, gas transmission lines and

Comprehensive Statistics

	Industrial Devices and Controls			
Figures are in million dollars, except where otherwise stated.	Bendix Aviation	General Electric	Minneapolis Honeywell Regulator	Westinghouse Air Brake
CAPITALIZATION:				
Long Term Debt (Stated Value)	$ 1.5	$ 300.0	$ 44.0	$ 40.0
Preferred Stock (Stated Value)	—	—	—	—
Number of Common Shares Outstanding (000)	5,056	87,396	6,959	4,182
Capitalization	$ 26.6	$ 736.9	$ 54.4	$ 81.9
Total Surplus	$ 179.8	$ 794.2	$ 146.9	$ 64.7
INCOME ACCOUNT: Fiscal Year Ended	9/30/57	12/31/57	12/31/56	12/31/56
Net Sales	$ 711.2	$4,335.6	$ 324.8	$ 236.9
Deprec., Depletion, Amort., etc.	$ 9.5	$ 119.9	$ 7.7	$ 5.1
Income Taxes	$ 31.8	$ 260.0	$ 24.3	$ 12.5
Interest Charges, etc.	$ 2.6	$ 11.2	$ 2.2	$ 2.8
Balance for Common	$ 27.5	$ 247.8	$ 21.3	$ 12.0
Operating Margin	8.5%	11.2%	14.5%	8.3%
Net Profit Margin	3.8%	5.7%	6.5%	5.1%
Percent Earned on Invested Capital	13.4%	20.1%	13.5%	11.3%
Earned Per Common Share	$ 5.44	$ 2.84	$ 3.07	$ 2.89
BALANCE SHEET: Fiscal Year Ended	9/30/57	12/31/57	12/31/56	12/31/56
Cash and Marketable Securities	$ 34.5	$ 256.5	$ 12.9	$ 12.3
Inventories, Net	$ 131.3	$ 745.4	$ 94.0	$ 72.8
Receivables, Net	$ 119.0	$ 576.5	$ 66.5	$ 58.8
Current Assets	$ 284.8	$1,327.2	$ 173.4	$ 145.3
Current Liabilities	$ 158.7	$ 708.6	$ 41.5	$ 48.8
Working Capital	$ 126.1	$ 618.6	$ 131.9	$ 96.5
Fixed Assets, Net	$ 69.9	$ 737.1	$ 63.4	$ 43.1
Total Assets	$ 370.0	$2,361.3	$ 246.6	$ 196.2
Cash Assets Per Common Share	$ 6.82	$ 2.93	$ 1.85	$ 2.96
Current Ratio (C. A. to C. L.)	1.8	1.8	4.1	3.1
Inventories as Percent of Sales	18.4%	17.2%	28.9%	30.7%
Inventories as % of Current Assets	46.1%	56.1%	54.2%	50.0%

Comparing the Position of Leading Electronic Companies

	Business Machines					Radio and Television					
Westinghouse Electric	Addressograph Multigraph	Burroughs Corp.	International Business Machines	National Cash Register	Sperry Rand	Magnavox Co.	Motorola	Philco Corp.	Radio Corp. of America	Sylvania Electric	Zenith Radio
$ 320.9	$ 1.9	$ 75.6	$ 375.0	$ 73.4	$ 113.8	$ 5.5	$ 19.0	$ 23.9	$ 249.9	$ 62.5	—
$ 48.6	—	—	—	—	$ 2.5	$ 5.8	—	$ 10.0	$ 14.5	$ 9.5	—
16,943	913	6,051	11,552	7,065	28,279	890	1,935	3,984	14,031	3,526	492
$ 581.4	$ 11.0	$ 105.8	$ 790.8	$ 145.4	$ 130.5	$ 12.2	$ 24.8	$ 45.9	$ 292.6	$ 98.5	$ 3.6
$ 538.9	$ 38.3	$ 76.4	$ 206.7	$ 51.6	$ 320.1	$ 15.8	$ 60.3	$ 78.5	$ 245.7	$ 101.3	$ 60.8
12/31/57	7/31/57	12/31/57	12/31/57	12/31/57	3/31/57	6/30/57	12/31/57	12/31/57	12/31/57	12/31/57	12/31/57
$2,009.0	$ 106.2	$ 282.7	$1,000.4	$ 382.5	$ 871.0	$ 87.4	$ 226.3	$ 372.6	$1,170.9	$ 342.9	$ 160.0
$ 48.3	$ 1.9	$ 8.2	$ 140.9	$ 14.1	$ 21.7	$ 1.1	$ 2.8	$ 4.7	$ 24.3	—	$ 1.2
$ 66.8	$ 8.3	$ 7.7	$ 97.0	$ 25.1	$ 35.7	$ 3.3	$ 7.7	$ 2.5	$ 38.5	$ 11.6	$ 9.1
$ 11.0	$ .1	$ 3.7	$ 12.4	$ 3.5	$ 4.2	$ .5	$ 2.5	$ .8	$ 8.3	$ 2.7	—
$ 70.8	$ 7.6	$ 10.0	$ 89.2	$ 18.1	$ 49.1	$ 3.3	$ 7.8	$ 4.0	$ 35.3	$ 12.2	$ 8.1
6.4%	14.1%	9.2%	19.3%	11.7%	10.2%	8.4%	8.0%	2.4%	6.8%	7.6%	10.7%
3.6%	7.2%	3.5%	8.9%	4.7%	5.7%	4.7%	3.4%	1.1%	3.2%	3.7%	5.1%
9.1%	16.1%	9.4%	14.3%	14.7%	14.7%	16.7%	11.8%	4.3%	13.3%	9.1%	12.7%
$ 4.18	$ 8.40	$ 1.67	$ 7.73	$ 2.57	$ 1.74	$ 3.90	$ 4.04	$ 1.00	$ 2.52	$ 3.48	$ 8.29†
12/31/57	7/31/57	12/31/57	12/31/57	12/31/57	3/31/57	6/30/57	12/31/57	12/31/57	12/31/57	12/31/57	12/31/57
$ 236.0	$ 6.4	$ 13.9	$ 170.4	$ 21.0	$ 43.5	$ 3.6	$ 6.6	$ 26.0	$ 106.0	$ 8.5	$ 38.4
$ 480.6	$ 22.3	$ 97.1	$ 42.7	$ 75.3	$ 272.3	$ 20.5	$ 25.3	$ 48.7	$ 157.3	$ 79.5	$ 12.1
$ 304.4	$ 17.3	$ 68.0	$ 165.0	$ 65.9	$ 182.8	$ 14.3	$ 39.5	$ 74.0	$ 189.7	$ 69.4	$ 14.5
$ 942.2	$ 46.7	$ 180.5	$ 378.1	$ 163.9	$ 495.4	$ 38.7	$ 87.6	$ 150.0	$ 471.7	$ 159.3	$ 65.0
$ 235.5	$ 18.1	$ 89.1	$ 83.4	$ 93.4	$ 255.0	$ 20.4	$ 35.4	$ 70.6	$ 166.2	$ 47.3	$ 19.8
$ 706.7	$ 28.6	$ 91.4	$ 294.7	$ 70.5	$ 240.4	$ 18.3	$ 52.2	$ 79.4	$ 305.5	$ 112.0	$ 45.2
$ 332.4	$ 18.1	$ 89.2	$ 671.6	$ 74.3	$ 184.2	$ 9.3	$ 27.1	$ 39.7	$ 199.5	$ 76.7	$ 10.7
$1,400.6	$ 67.6	$ 271.5	$1,086.9	$ 267.5	$ 708.5	$ 48.4	$ 121.8	$ 195.1	$ 720.7	$ 247.3	$ 84.3
$ 13.93	$ 7.09	$ 2.31	$ 14.75	$ 2.98	$ 1.53	$ 4.14	$ 3.44	$ 6.52	$ 7.55	$ 2.43	$ 78.25
4.0	2.5	2.0	4.5	4.5	1.9	1.9	2.4	2.1	2.9	3.3	3.2
23.8%	21.0%	34.5%	4.2%	19.6%	31.3%	23.4%	11.1%	13.0%	13.4%	23.2%	7.5%
51.0%	47.9%	53.7%	11.3%	46.0%	55.0%	53.0%	28.9%	32.4%	33.3%	50.0%	18.6%

†—On new stock after 2 for 1 split.

petro-chemical plants will be completely automated. The time schedule may be optimistic, in view of current economic conditions, but the record of the past seems to assure that the prediction will not be too far from its mark.

Interestingly enough, the drive to automate is one of the principal props for the electrical equipment makers since the increasing use of electrically operated devices requires larger and more modern electrical generating and transforming facilities. How large the future market may be can be seen from the fact that a recent survey of 550 modern plants, owned by major companies, showed that not one of them had adequate transformer facilities to meet its requirements ten years hence. In other words, despite the tremendous capital spending boom industry has just undergone, it has done little more than catch up to its immediate power needs. To stay ahead, and to keep from becoming "under-powered" every one of these plants will have to be updated in the near future.

Outlook for Companies Varies Widely

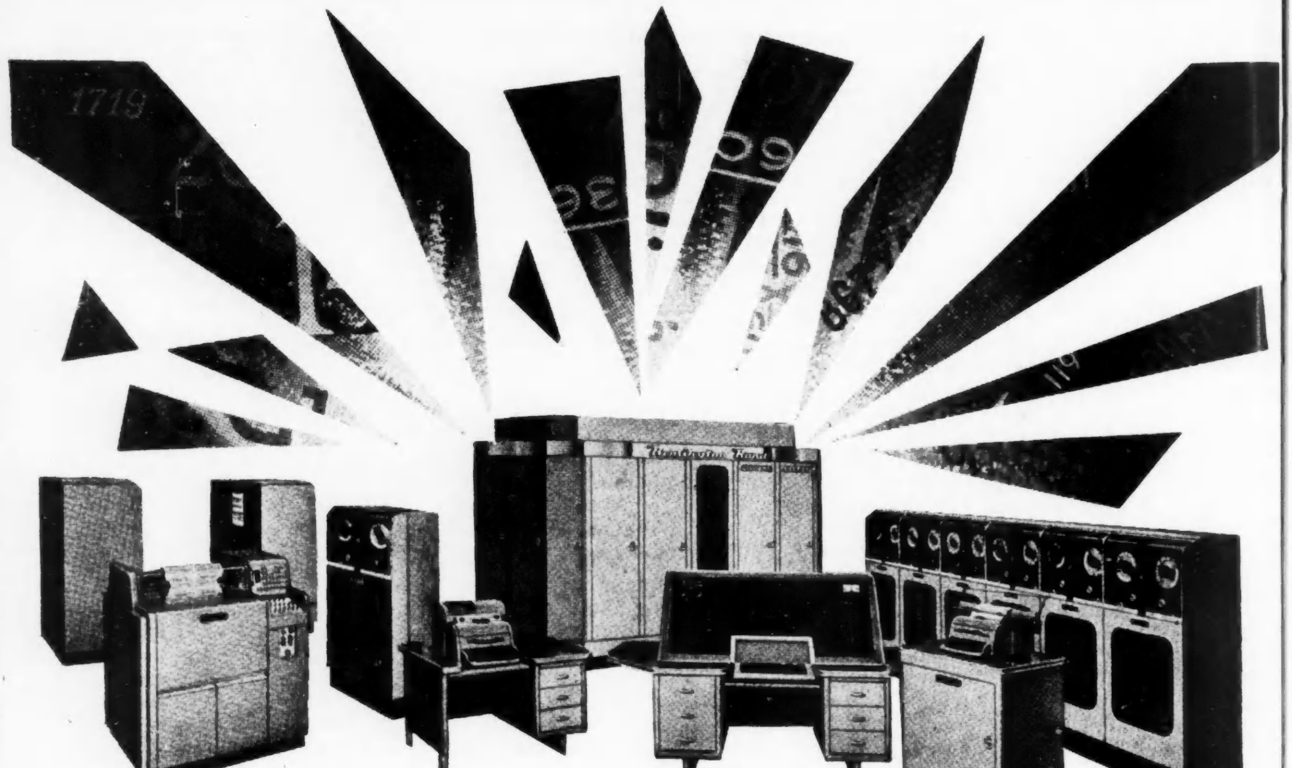
In view of the temporary slowdown in industrial automation, the earnings and dividend outlook for most devices and controls producers is in direct proportion to their participation in the government's nuclear energy and missile programs. Companies with a stake primarily in aircraft components, such as Bendix Aviation may find the pickings slimmer until they complete their full-scale changeover to missile production—and others, such as Square "D" and Robertshaw-Fulton, with sales concentrated in the industrial controls field will undoubtedly continue to feel the results of the capital spending slowdown. The larger companies, and several smaller ones for special reasons, should be more fortunate.

Covering a broad front in the electronics field, **General Electric** should continue its upward sales and earnings trend throughout 1958. Total results for the year, of course, will depend on heavy electrical equipment shipments as well as electronics, but so far the outlook for most of the company's endeavors appears good.

In military electronics, GE has a powerful position. Total employment in its defense electronics installations tops 21,000, and should grow further in the year ahead. In the missile field alone, the electronics divisions supply arming and fusing devices for five separate missiles; ground control apparatus for the Talos weapon; fire control equipment for the Tartar and Polaris; guidance systems for the Atlas and Polaris; and GE is the prime contractor on the Sidewinder air-to-air missile.

Furthermore under direct government contract, the company is doing basic research in such important fields as semiconductors, electronic propulsion for missiles and "spaceships", and solar energy.

In 1957, GE's sales and earnings climbed to new record levels, with the improvement carrying through the fourth (*Please turn to page* 52)



Varying Prospects for BUSINESS MACHINE COMPANIES

PART 2—BY W. A. HODGES

OF all the new developments based on electronics, the computing machine has had the most spectacular success. From negligible sales in 1950, the value of all machines either rented or sold skyrocketed to $350 million in 1956 and $500 million in 1957. However, the industry's ambitious goal of $1 billion in revenues by 1960 may have to be moderated, since sale and rental of costly equipment are showing a tendency to slow down in line with the overall cut in capital spending.

So far, however, most major producers report continuing interest in their products among the nation's larger companies, although total orders so far are running behind a year ago. GE for example, probably the leading industrial user of giant computers with 11 now in operation, has three more major ones and several medium sized machines on order. Moreover, the big companies generally report complete satisfaction with their "brains." Westinghouse, which pays $400,000 a year to rent its Univac from Remington-Rand declared the machine paid for itself in eight months by solving important production and scheduling problems for its heavy electrical equipment division.

Southern Railway is also enthusiastic, claiming savings of almost $850,000 in its first year's experience with an IBM 705, and visualizes ultimate savings up to $1.5 million a year just on clerical expenses.

With testimonials of this kind, the business machine manufacturers, who dominate the computer field, are not too concerned about the "big" company market for their products. But there is widespread realization that smaller and cheaper computers must be developed rapidly if the small and medium-sized company market is to be successfully exploited.

Only six months ago, companies of all sizes were eager buyers and sales and rentals were booming, but today all but the largest corporations are showing noticeable hesitation in making the huge commitments entailed in most computer purchases. An idea of some of the expenses involved goes far in explaining this hesitation. Computers today are priced at anywhere from $30,000 to $3 million, and rent for $1,000 to $60,000 a month. But whether rented or bought outright, installation can run as high as $100,000 and the engineering costs involved in setting up the machine to perform useful functions varies between $100,000 and $500,000.

With costs of this kind to contend with, many smaller companies that were in the market for computers before the business slowdown are taking a

long, hard second look before plunging headlong into commitments. But costs aren't the only problems. Many firms candidly report disappointment in the effective use they have been able to make of computers and admit, that for their needs, the results so far have not justified the cost. Almost all, however, see long-term advantages to be gained.

Nevertheless, in light of current business conditions many smaller firms, beset by slower sales of their own products and tight cash positions are not particularly interested in long range cost savings in return for higher current spending.

In an effort to meet the needs of smaller companies, National Cash Register, which entered the field late but has already made its presence felt, is almost ready to market a desk-sized, all-purpose computer in the $40,000 to $50,000 range that should do much to offset the widespread objection that many firms cannot get enough use out of the major computers to make them pay.

Sales of Other Business Machines Tapering Off

For the manufacturers of computing machines, the slowdown in sales coincides with a slackened demand for their conventional business machine products, indicating that profits may turn down in 1958, from their high levels of recent years. Computers themselves have not been profitable items until now despite their rapid acceptance, for several reasons. Principal among them is the exceptionally high research and development costs, but in the last two years the situation has been compounded by the fast technological advances in the field that have made many machines obsolete long before their normal write-off period expired.

The earnings slack, for most producers, was taken up in profits from their conventional machines, but in recent months sales of typewriters and other "bread and butter" items have begun to slip.

Towards the end of 1957, Underwood, Royal-McBee, Smith-Corona and Remington-Rand all announced curtailments in the production of small machines and the layoff of workers for short periods of time. Since then, most workers have been called back, but production continues at a lower level than a year ago. In part the production cutbacks were the result of over-production in the first half of 1957 in anticipation of a strong second half market. When it failed to materialize, production was cut to bring inventories back into line with sales expectations. But experience through the first two months of 1958 indicates that the year end hesitancy of buyers was not a temporary phenomenon, but part and parcel of the general slowdown in capital outlays by industry.

Demand Strong From Banks

Aside from the major industrial companies and the military, the biggest potential market for computers is in the banking field. Bank automation has developed slowly, but in the last two years it has advanced by leaps and bounds, and the results have been so successful that no slowdown appears in sight. One recent survey showed that the nation's banks expect to spend almost $400 million on computers in the next five years, or more than the value of all computers sold and rented in 1956. Possibly the biggest spur to these expenditures is the recent development of ERA in England, a system that has been termed the "missing link" in data processing.

ERA is a new device that can "read" typewritten characters and feed the information into a computer at the rate of 120 characters per second. As an adjunct to automatic check handling systems, and for data processing machines in retail store operations, ERA may well be the answer to the harried executive's prayers.

So dynamic is the potential of ERA that American computer manufacturers are engaged in something of a mad scramble to either produce or license the device, which is owned by the Solartron Electronic Group, Ltd., in England. Rheem Manufacturing has already set up a joint company with Solartron to do further research and development work on ERA and other electronic equipment, and IBM and National Cash Register are in the vanguard of companies seeking licensing agreements for the manufacture of the machines in the U.S. In addition a few firms have already signed contracts calling for the British firm to produce ERA machines that can be used with their own particular brand of computer.

The pioneering work being done in the banking field on data processing as an accounting tool may well be the most (*Please turn to page* 48)

Leading Companies Manufacturing Business Machines

	Earnings Per Share			Dividends Per Share			Recent	Div.	Price Range
	1955	1956	1957	1955	1956	1957*	Price	Yield	1957-58
Addressograph-Multigraph	$7.86	$8.34	$8.40[1]	$4.00[4]	$4.00[4]	$4.00[4]	163	2.4%	204 -132
Burroughs Corp.	1.97	2.35	1.67	1.00	1.00	1.00	30	3.3	52⅜- 27⅞
Electronics Corp. of Amer.	.59	[d] .71	.22	.....	.....	.....	7½	....	12⅞- 5½
International Business Machines	5.32	6.55	7.73	1.60[2]	1.90[2]	2.60[4]	338	.7	376½-270½
Marchant Calculator	2.64	3.13	.90	1.30	1.30[4]	.60	15	4.0	38 - 13¼
National Cash Register	2.33	2.62	2.57	1.07	1.10[4]	1.20	57	2.1	70⅝- 46¼
Royal McBee	2.45	3.47	2.68[1]	1.25	1.40	1.40	18	7.7	40⅜- 17½
Smith-Corona Inc.	1.63	2.14	2.55[2]	.30[4]	.80[4]	1.00	18	5.5	23⅝- 14¾
Sperry Rand	1.80	1.74	1.30[3]	.36	.80	.80	19	4.2	26⅛- 17⅝
Telautograph Corp.	1.55	[d]1.41	.34	.67[4]	.57[4]	.....	5¼	....	8¾- 3½
Underwood Corp.	2.01	[d]10.91	[d]2.13	1.50	.40	.40[5]	15	....	33¾- 12⅛

*—Or latest 1958 div. rate.
[d]—Deficit.
[1]—Year ended July 31.
[2]—Year ended June 30.
[3]—Estimated; Year ended 3/31/58.
[4]—Plus stock.
[5]—Directions 2/20/58 omitted div.

TV-RADIO

PART 3
BY STANLEY DEVLIN

NOTHING illustrates the crosscurrents in the electronics field as much as the radio and television segment. In all, the sale of sets and components accounted for about 25 per cent of the total electronics volume in 1957, but some interesting changes developed in the industry's structure. Television set sales slid 200,000 units to 6.6 million, but production dropped by over a million units as producers cut back output to bring dealers' inventories into line. On the other hand, radio, the industry that was supposed to be "killed" by television, had the best sales since 1948, scoring a million and a half unit rise over the previous year.

As if to compound the picture further, applications for new TV stations slowed down, possibly because of the "pay-TV" controversy, while applications for both AM and FM radio stations climbed to their highest point in years. Moreover, the phonograph, which at one time was accorded the same premature funeral because of radio as radio received from TV, continued its vigorous "hi-fi" recovery with over 5 million units sold, an all time record.

Thus we have an interesting study in contrasts within the industry itself. Television galloped to a quick maturity, saturating the market for new sets within ten years and entered a period of slow decline. Radio and phonographs, on the other hand, which had their declines prematurely accelerated by technological obsolescence have now begun to climb back, and can be expected to become more and more important in the industry's structure in each of the next several years.

Why the Comeback in Radio and Phonographs?

Some of the reasons for the resuscitation of radio are no doubt more the province of psychologists and social scientists than the business analyst, but some factors stand out fairly clearly. One is the obvious

Leading Companies In Radio and Television

	Earnings Per Share			Dividends Per Share			Recent	Div.	Price Range
	1955	1956	1957	1955	1956	1957*	Price	Yield	1957-58
Admiral Corp.	$1.66	$ .44	$ .75[7]	$1.00	$1.00	.....	8¼	....	14⅞- 6½
American Broad. Paramount Theatres	1.87	1.78	1.10[7]	1.20	1.20	$1.00	15	6.6%	24⅞-11⅝
Columbia Broadcasting System "A"	1.79	2.13	2.90	.76[2]	.90[2]	1.00[2]	26	3.8	36⅛-23½
Consolidated Electronic Industries	1.30	3.12	2.50				24		35½-18
Cornell-Dubilier	3.41	2.01	1.38	2.10	1.40	.80	13½	5.9	27½-12½
DuMont (Allen B.) Laboratories	[d]1.61	[d]1.70	[d]1.75[7]	[3]	.....	.....	4	....	6⅛- 3
Emerson Radio & Phonograph	1.28	.04	.07	.60	.30[2]	.....	5	....	6⅞- 3¾
Hazeltine Corp.	2.40	2.80	2.80[7]	2.00	1.40[2]	1.40[2]	35	4.0	44½-29¾
Hoffman Electronics Corp.	2.15	2.19	2.25[7]	1.00	1.00	1.00	24	4.1	25⅞-17¼
Magnavox Co.	3.05	3.54	3.90[1]	1.50[2]	1.50[2]	1.50[2]	37	4.0	44 -28⅛
Motorola, Inc.	4.39	4.12	4.25[7]	1.50	1.50	1.50	41	3.6	51¾-35¾
Philco Corp.	2.13	.05	1.00	1.60	.80[2]	4%[4]	15½	....	18⅜-11
Radio Corp. of America	3.16	2.63	2.52	1.35	1.50	1.50	33	4.5	40 -27
Sylvania Electric	4.30	4. 1	3.48	2.00	2.00	2.00	36	5.5	46¼-29¼
Tung-Sol Electric	4.66	3.84	3.31	1.60	1.25[2]	1.40[2]	26	5.3	37½-21¾
Zenith Radio	8.15[5]	6.27[5]	8.29[5]	2.50[5]	2.50[5]	3.00[6]	69	4.3	70⅝-45¾

*—Or latest 1958 div. rate.
d—Deficit.
1—Year ended June 30.
2—Plus stock.
3—Distrib. of 2/5 sh. of DuMont Broad. Corp.
4—Paid in stock.
5—Adjusted for new stock after 2 for 1 split.
6—Includes $.50 quarterly rate and possible $1.00 year-end extra.
7—Estimated.

swing to a wider national preference for music which is reflected not only in radio and phonograph sales but in the enormous number of records of all types turned out each year. Another is the many millions of radios in cars, an area that is denied the television producers for all practical purposes, for obvious safety reasons. In all, over 5 million additional car radios were produced and sold last year raising the total in use to over 50 million.

The public's willingness to listen to the radio after several years of television indulgence has had a profound effect on the broadcasting industry. Radio stations are once more in demand, and the Federal Communications Commission has been forced to make more wave lengths available for both AM and FM transmission. Moreover, commercial broadcasting is again a profitable venture as small advertisers, especially on the local level, prefer that medium to television, with its enormous expense. For all practical purposes, television advertising on the major networks is now confined to national advertisers, while local purchasers of broadcasting time confine their activities to either the smaller TV stations, the late evening, lower rate hours, or radio. From all indications they are getting their most satisfactory results from the last named.

Profits Still Slim For Set Makers

For the producers of radio and television sets the renewed upward trend in radio receivers is welcome news, but despite several mergers in recent years and the elimination of a number of weak sisters, profits are still skimpy for all but the most efficient producers. Television set sales have been in a downtrend for over three years now, and there is still no sign of a reversal although the replacement market alone should be able to absorb between three and four million sets a year. In line with reduced sales of TV sets, component parts sales have also dropped in the civilian market. Television picture tube sales receded to $183 million last year from $196 million in 1956, but other tube sales, reflecting large replacement volume and increased military business rose to $384 million from $374 million a year earlier.

Inventory cutting towards the end of last year, and the relatively small drop in sales compared with the sharp cutback in production may be an indication that set sales are nearing a bottom, but with consumer spending currently curtailed in the face of a business recession and mounting unemployment, the first half of 1958 will prove a difficult period for testing the market's base.

Industry Controversies

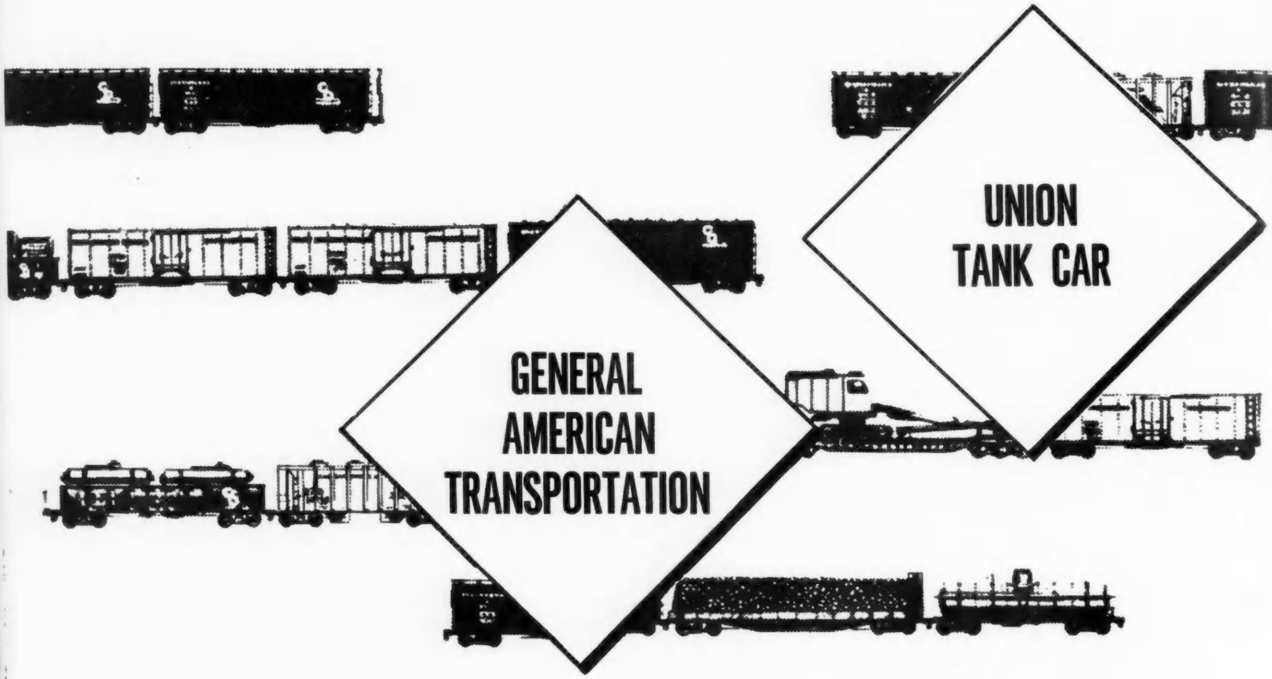
Undoubtedly two other factors adversely affecting the sale of television sets are the "color" controversy and the running battle between the adherents of "pay-TV" and the champions of "Free-TV." The "pay-TV" melee has had a greater impact on the broadcasters than on the manufacturers, but there has been some hesitation among set buyers who fear (falsely) that the current models will not be usable for coin-controlled programs.

The "color" issue is by far the greater one for the set makers, and few doubt that many buyers are reluctant to purchase black and white sets if cheap color video is going to be available quickly. RCA is of course the principal champion of color television, having invested a fortune in research, production and broadcasting facilities, and the company enthusiastically reports that color sales are gaining momentum. But despite the 50 per cent increase in sales RCA is claiming this year, most of the industry feels it is still too early to make huge investments in production machinery and promotional activities.

Opposition within the industry varies however. Whereas most companies do not feel the market is ready yet, a few corporations, such as Zenith are holding off because they do not feel the present color sets meet the high standards they set for their products. In any event, popular-priced color doesn't seem to be around the corner yet and this is the only factor with the apparent potential for renewing the television boom.

No Earnings Rebound Expected For Producers

In view of the still (*Please turn to page* 53)



Comparing Two Leaders in
EQUIPMENT RENTAL FIELDS

BY FREDRICK UHLMAN

◆ Comparisons of leading corporations in the same industry frequently reveal interesting contrasts. Consider the two principal concerns engaged in leasing railroad cars to shippers, namely, General American Transport Corporation and Union Tank Car Company. Both have been confronted with the same set of market conditions and economic influences. Nevertheless, General American has come up with more rapid growth and benefits for stockholders in the last decade than its older competitor. Union Tank Car originally was an affiliate of Standard Oil Company (New Jersey) and was among the first "spin-offs" in American corporate history.

Judging by the record unfolded in annual reports, financial statements and the like, one would be inclined to attribute the rapid advancement of General American to the management's decision several years ago to diversify operations. Need for expansion in fields other than railroad transportation was indicated when highway trucks and trailers began to capture freight shipments that had been handled by rail carriers, especially in tank cars. General American's management also displayed ingenuity in developing special types of equipment for handling bulk freight not only in tank cars but in units designed for carrying dry products, such as granular chemicals, etc.

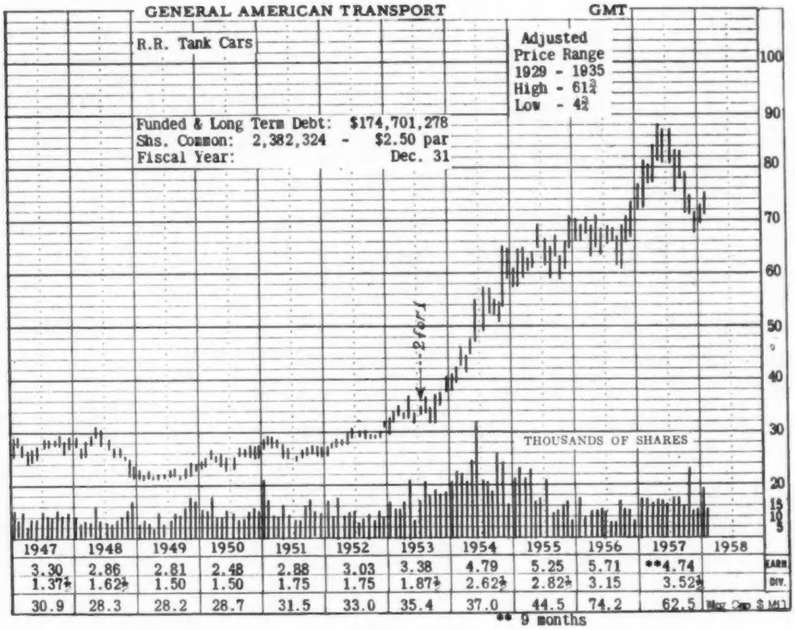
Until last year Union Tank Car appeared content to concentrate on its traditional activity—that is, movement of petroleum products. Tank cars were designed primarily for handling gasoline and other refined products, as well as liquified petroleum gas and asphalt. The company had maintained long term contracts and working arrangements with virtually all the Standard Oil Companies and approximately 90 per cent of its leased equipment was devoted to movement of petroleum products. Late last summer, however, management took its first step in the direction of diversification by acquisition of the Phoenix Manufacturing Company and its wholly owned subsidiary, Graver Tank & Mfg. Co. Later Union Tank purchased Sinclair Oil Corporation's entire shipper-owned fleet of tank cars in a record transaction. These developments are regarded as signifying a major change in policy.

Statistical Comparison

A glance at the record of price fluctuations as shown in the accompanying charts, shows the extent of gains registered by General American in market valuation of common shares. This evidence of progress indicates that growth in sales and earnings is recognized by investors. The charts may suggest to some observers the possibilities of appreciation in

Union Tank Car if this concern should be as successful as its larger competitor in carrying out a vigorous diversification program.

A statistical comparison of significant data reveals interesting contrasts between these two companies over the last decade. Examining first several items in the income account and balance sheet of General American, we find that total manufacturing and services increased from \$97.5 million in 1948 to \$220.7 million in 1957, an increase of 122 per cent in volume. In the same period net profit on a share basis increased 131 per cent to \$6.61 a share last year from \$2.86 in 1948. Dividend payout registered approximately the same improvement at 135 per cent in rising to 3.52½ a share in 1957 from \$1.50 in 1948. Working capital rose 95 per cent and book value increased almost as much.



** 9 months

Union Tank Car enjoyed better progress in revenues from sales and services in the decade with a jump from \$18.9 million in 1948 to almost \$63 million in 1957, but on a share basis net earnings and dividends failed to keep pace with the larger company. Net income rose from \$4.3 million, or \$2 a share, in 1948 to \$8.3 million, or \$2.64 a share last year, an improvement of only 32 per cent; while dividends were raised from \$1.30 a share in 1948 to \$1.60 last year, an increase of 23 per cent. Working capital went from \$3.3 million to \$6.2 million in 1956 but jumped to \$16.3 million in 1957 when inventories of the new manufacturing subsidiaries were added. Book value of the shares went up from \$18.99 to \$27.53 for an increase of 45 per cent in the decade.

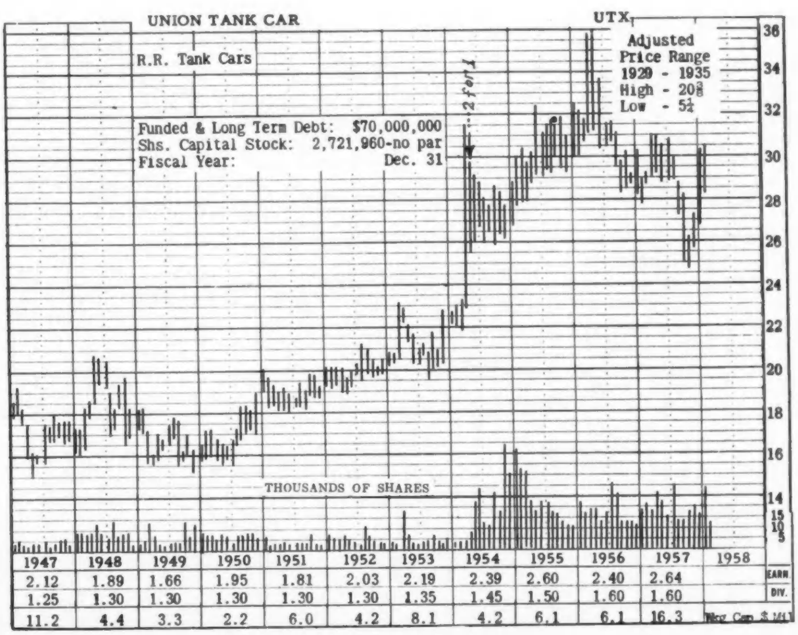
In both instances figures expressed on a share basis have been adjusted for stock splits in the ratio of two shares for one: in 1953 for General American and the following year for Union Tank Car.

General American Transportation

Turning now to a more detailed study of General American, let us examine the diversification program and weigh potential stabilizing influences on operating results. Later, a similar study will be attempted in the case of Union Tank's initial move in the direction of manufacturing activities. This comparison should bring out differences in the degree of development and indicate future expansion possibilities of Union Tank Car.

In the case of General American, car-leasing activities and terminal operations account for somewhat less than half of gross income, but these phases of the business are considered more profitable than manufacturing operations. The company contracts with shippers generally on long term transactions for leasing its equipment, including specially designed units for handling bulk materials. About 1,000 new cars were added last year to bring the total under lease to 63,500. Contracts with shippers are said to involve virtually the entire fleet for all of 1958, tending to assure stable income for this division, which is a major contributor to profits.

Demand for a new type of car called "Airslide" has increased to such an extent that General American plans to construct about 1,400 this year for use of shippers of granular materials. Rising labor costs have compelled many concerns to adopt this modern transportation facility, (*Please turn to page* 50)



FOR PROFIT AND INCOME

Yields

While people debate the uncertain outlook for business, and for the industrial and rail stock averages, the bull-market in stable-industry income stocks continues. It is founded on easing money rates, as translated into reduced return available on fixed-income securities, and the pressure of funds seeking employment in relatively low-risk stocks on a satisfactory yield basis. It is bound to go further, perhaps at least over the rest of this year, in line with the money-market outlook. Income-stock yields have already fallen rather sharply, forcing investors to alter ideas as to what constitutes a "satisfactory" return. For example, here are yields on some issues now as compared with those at their 1957 market lows: Corn Products 4.3% versus 5.4%; National Biscuit 4.7% versus 5.7%; National Dairy Products 4.2% versus 5.4%. On the same comparison, average yield on utilities has fallen from about 5.5% to 4.7%.

Profits

Clients who bought favored income stocks on our numerous earlier recommendations are getting an excellent return on the cost of their investments and have sizable capital gains. The time has not yet come for any general shift to more volatile stocks. Profit potentials from here on are, of course, more limited. However, a fair number of good-grade issues are still available at yields materially over 5%. Examples, all suitable for current buying, include Interstate Power, Duquesne Light, Equitable Gas, Public Service of Indiana, Reynolds Tobacco "B", Union Tank Car and Washington Water Power. Among these, dividend boosts are likely between now and early-1959 by Public Service of Indiana, Reynolds and Washington Water Power.

Others

There are some lower-yield stocks which could work higher in anticipation of likely or possible dividend increases within the next 12 months or so. They include Brown Shoe, Community Public Service, Illinois Power, National Biscuit, National Dairy, Public Service of Colorado and Puget Sound Power & Light. Growth utilities are in a different

INCREASES SHOWN IN RECENT EARNINGS REPORTS

		1957	1956
Bridgeport Brass Co.	Year Dec. 31	$3.41	$2.83
Polaroid Corp.	Year Dec. 31	1.44	.98
Colgate-Palmolive Co.	Year Dec. 31	7.81	6.04
General Precision Equip.	Year Dec. 31	3.03	1.64
Abbott Laboratories	Year Dec. 31	3.30	2.80
Eastern Gas & Fuel Associates	Year Dec. 31	4.41	3.61
Motor Products Corp.	Quar. Dec. 31	.51	.22
New York Air Brake	Year Dec. 31	3.18	2.56
Columbia Broadcasting System	Year Dec. 28	2.90	2.17
Schering Corp.	Year Dec. 31	3.80	3.41

class. They are bought primarily for slow but highly probable long-pull capital gains, with current yield—although it is as much as 4% or so in some cases—a decidedly secondary consideration. Some of the more promising are: Florida Power & Light, Florida Power Corp., Tampa Electric, Central & South West, Middle South Utilities, Southern Company, Southwestern Public Service and Texas Utilities.

Another Look

Recently up to a new high around 49 on heavy trading, Lorillard has remained a market sensation. There are believable rumors that the company may show first-quarter earnings at an annual rate around $8 a share, against $7.72 in the 1957 fourth quarter, when the gain, partly seasonal, from the third quarter was $3.64 in annual rate. Possible market valuation of earnings is the key question. At its highs in most of the postwar years the stock reached levels ranging from roughly 10 to 15 times earnings. However, until the "staying power" of largely increased profits is demonstrated over a considerable period of time, a relatively low price-earnings ratio can be expected. Nobody can say whether it might be 7 or 8 or 9 times earnings, against roughly 6 times possible 1958 profit at the stock's present price. The issue may be subject to sharp near-term gyrations; but basis for a reversal of trend is not in sight. Despite the additional run-up, we repeat the advice given here a fortnight ago: Stay with it for a while longer. But we would not risk new buying.

Divergencies

In a trading-range market, many of the week-to-week variations in relative behavior of the stock groups undoubtedly reflect transient technical factors, such as a temporarily over-sold or over-bought position, and short-selling or short-covering mostly by professionals. Thus, such long-laggard groups as aluminum, automobiles, coppers, the heating-plumbing section of the building group, and machine tools have recently performed better than the market, with short-covering certainly an important, though temporary, booster. Earlier gains have been extended by such favored groups as drugs, dairy products, food-store stocks and, in modest degree, by utilities. Groups behaving somewhat worse than the general market at this writing include: aircraft, air lines, auto parts, electric equipments, farm equipments, motion pictures, paper and tires.

Strong

Although not many, some speculative stocks have been coming to life, including American Ice, Bell & Howell, Brunswick-Balke-Collender, Falstaff Brewing, Grayson-Robinson, Spiegel and Wilson. At present levels, avoid being tempted to buy any of them. A cross-section sample of better-grade stocks now pointing upward—which in most cases is an extension of prior trends—includes: American Chicle, Consumers Power, Corn Products, Household Finance, Kroger, Merck, National Biscuit, National Dairy, Oklahoma Natural Gas, Otis Elevator, Reynolds Tobacco, and Seaboard Finance.

Cloud

As Spring begins, the "weather" forecast for the automobile industry remains cold and cloudy. The cold can be blamed on the general business cycle, and is therefore temporary. The cloud is evidence of a growing buyers' strike against fancy-Dan cars at fancy prices. Its possible ultimate implications, still debatable at present, are worrisome to the industry and to investors. Thus, the rally from its low to date by the auto-stock group is one of the smallest among the durable-goods stock groups. If the "Big Three" have to put significantly increased future emphasis on stripped-down economy models or small cars or both, the repercussions could be wide. Basis for a bullish view on these stocks, by buyers or holders, cannot be cited, even though the companies are large, strong and resourceful.

April Market

The past record is without seasonal bias either way in the stock market in April. Since 1897 the month brought some net gain by the industrial average in 31 years, some net retreat in 30 years. For rails the score is 29 ups against 32 downs. What might it be in April this year? Your guess is as good as ours. The outcome depends on whether recently improved investment-speculative sentiment improves further, in the face of continuing drab news on business and earnings, with many very poor profit reports to be digested toward the end of the month; and also to a considerable extent on technical considerations. The market has had a substantial, fairly steady upswing since February 25, probably with some impairment of the technical position. Unless it is corrected before the end of March, hopes for April should not be high.

Valuation

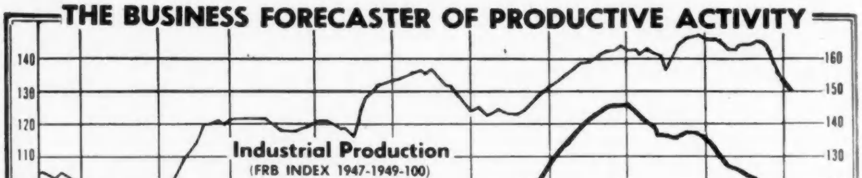
After a large advance, a favored stock group can react at any time; but the primary investment question is whether it is overvalued on indicated earnings. The drug group is a case in point; and it does not take much figuring to reach the conclusion that most of these stocks are still not extremely priced. For comparison, the Dow industrial average is around 14 times estimated 1958 earnings. The ratios for six leading drug stocks—American Home Products, Bristol-Myers, Merck, Parke Davis, Pfizer and Warner-Lambert—range from 11.4 to 16.7; and average 13.5 times. On demonstrated growth, and on growth prospects over both the medium term and the long term, the drugs

(*Please turn to page* 56)

DECREASES SHOWN IN RECENT EARNINGS REPORTS

		1957	1956
Clark Equipment Co.	Quar. Dec. 31	$ .79	$1.26
Goodrich (B. F.) Co.	Year Dec. 31	4.40	4.90
Wisconsin Electric Power	Quar. Dec. 31	.54	.62
Champion Paper & Fibre	Quar. Dec. 31	.68	.80
Great Northern Paper Co.	Year Dec. 29	2.42	5.44
Anderson-Prichard Oil	Year Dec. 31	2.93	3.41
Bendix Aviation Corp.	Quar. Dec. 31	.97	1.19
Sunbeam Corp.	9 mos. Dec. 31	2.38	3.02
Ford Motor Co.	Quar. Dec. 31	.98	1.69
Myers, (F. E.) & Co.	Quar. Dec. 31	.68	1.11

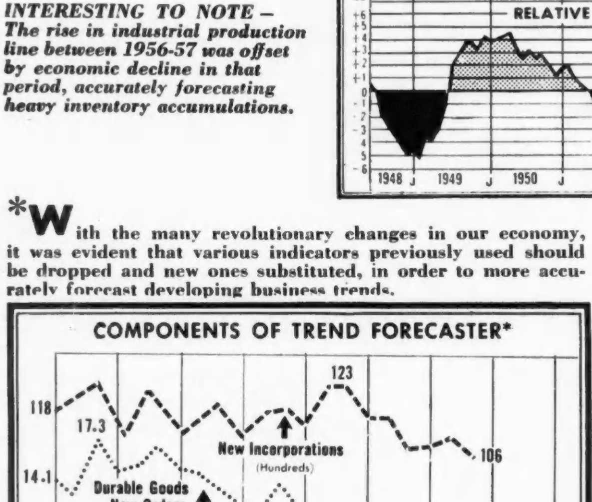
the Business



Business Trend Forecaster *

INTERESTING TO NOTE – The rise in industrial production line between 1956-57 was offset by economic decline in that period, accurately forecasting heavy inventory accumulations.

***With the many revolutionary changes in our economy, it was evident that various indicators previously used should be dropped and new ones substituted, in order to more accurately forecast developing business trends.**



(*)—Seasonally adjusted except stock and commodity prices.
(a)—Based on F. W. Dodge data. 2 month moving average. In constant dollars.

This we have done in our new *Trend Forecaster* (developed over a period of several years), which employs those indicators (see Components of Trend Forecaster) that we have found to most accurately project the business outlook.

As can be seen from the chart, industrial activity in itself is not a true gauge of the business outlook—the right answer can only be found when balanced against the state of our economy. The *Trend Forecaster* line does just that. When it changes direction up or down a corresponding change in our economy may be expected several months later.

The depth or height of the developing trend is clearly presented in our *Relative Strength Measurement* line, which reflects the rate of expansion or contraction in the making. When particularly favorable indications cause a rise that exceeds plus 3 for a period of time, a strong advance in general business is to be expected. On the other hand, penetration of minus 3 on the down side usually precedes an important contraction in our economy.

We believe that subscribers will find our Business Trend Forecaster of increasing usefulness both from the investment and business standpoints.

Business Trend Forecaster

As of this writing, data on first-quarter trends in the components of the **Trend Forecaster** are still incomplete and tentative. On the basis of such figures, however, the only series which has exhibited any sustained strength appears to be stock prices. New orders, average factory hours worked, business failures and the two construction series all have been negative in their general trend. **The Relative Strength Measurement** in the first quarter has apparently risen somewhat from its minus 4.5 level of late 1957, but has as yet given no indication of a coming business recovery.

It may be instructive to note that in the past five quarters the **Relative Strength Measure** has etched out a negative area (the black area in the accompanying chart) greater than in any earlier postwar period. The measure sank lower, for a few months, at the onset of the 1949 recession, but the cumulative weaknesses appearing in 1957 are considerably greater than those recorded in 1949. The **Trend Forecaster** itself has been declining for a more prolonged period than in either of the two earlier postwar recessions. This is suggestive of the more pervasive nature of the current recession.

Analyst

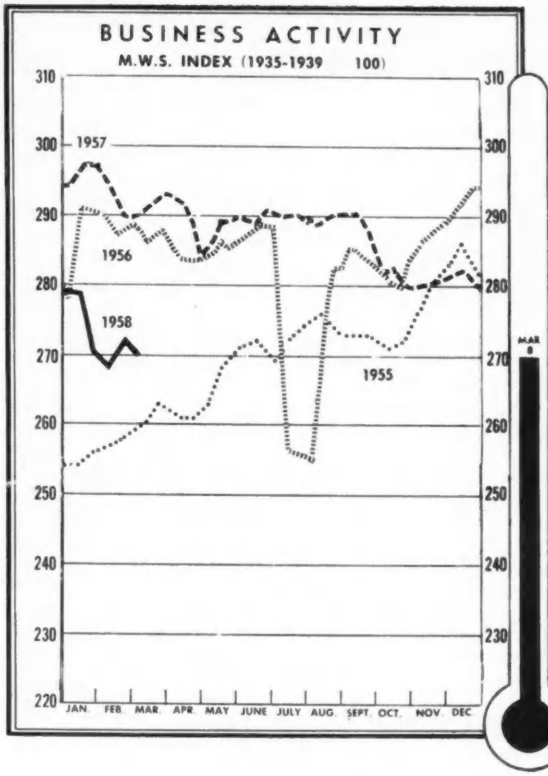
CONCLUSIONS IN BRIEF

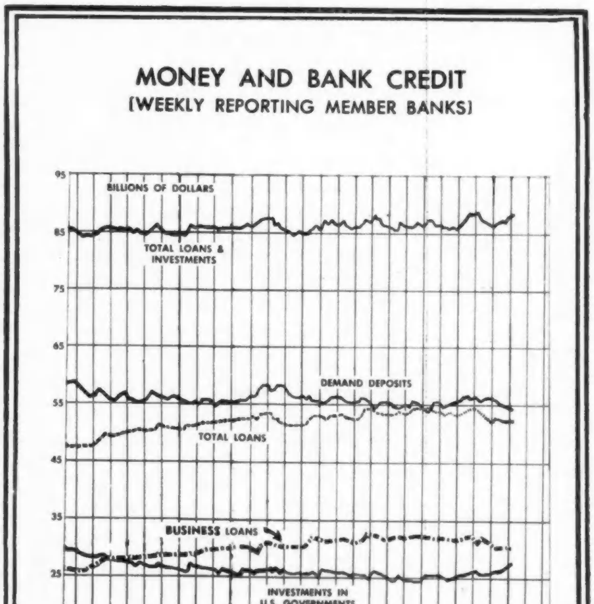
PRODUCTION—Further declines in output occurred in March; the total drop in this recession now exceeds the 10% declines of the 1954 and 1949 recessions. Slight further decline probable for second-quarter, but with many cross-currents.

TRADE—After its very sharp fall in February (owing partly to weather) some recovery occurred in March. But trade outlook for second quarter is not favorable, particularly in hard goods. Expect price weakening, in many hard goods, and some soft goods.

MONEY & CREDIT—Loan demand is running very sharply below a year ago; the commercial banking system is now operating with ample free reserves, and interest rates are seeking lower levels. Opportunities to borrow under very favorable terms lie immediately ahead.

COMMODITIES—Farm prices continue to supply the only important strength, but here and there prices of industrial commodities have reached points that seem to resemble a floor. Finished goods prices, however, are now under greatly intensifying pressure. Outlook; persistent softening in general prices over next three months.





IN the first quarter of 1958, business has been declining at a rate matching the severity of the two preceding postwar recessions. In the second quarter, the rate of decline is almost certain to abate somewhat, but the depth of the 1958 recession, it is already clear, is about to exceed its two postwar predecessors.

The reasons for expecting further decline, at a reduced rate, are as follows. In capital goods industries, the production rate has been maintained only through a rapid devouring of backlogs; ordering rates have run far below shipments throughout the critical capital goods lines. In many of these lines, backlogs are approaching an irreducible minimum; the order and in-process pipelines are emptying. At some point in the near future, production rates will have to take a precipitous drop.

Secondly, in a number of industries, of which petroleum and aluminum may be apt illustrations, historic growth potentialities have delayed decisions to curtail output until the need for curtailment has become blatantly clear. In these industries, adjustment to the realities of 1958 has undrstandably been slow and reluctant; further adjustment is inevitable.

But the rate of decline in total output, as measured by the Federal Reserve's index of industrial production, is likely to be less severe in the second quarter than in the two preceding quarters because a number of important industries have already been forced to curtail excessively, owing to inventory corrections. In steel, the most obvious example, output is more likely to rise than to fall over the next three or four months, as the present violent rate of inventory correction passes its peak. Even though metal consumption continues to decline—which it is expected to

(Please turn to following page)

Essential Statistics

THE MONTHLY TREND

	Unit	Month	Latest Month	Previous Month	Year Ago
INDUSTRIAL PRODUCTION* (FRB)	1947-'9-100	Feb.	130	133	146
Durable Goods Mfr.	1947-'9-100	Feb.	137	143	164
Nondurable Goods Mfr.	1947-'9-100	Feb.	125	126	131
Mining	1947-'9-100	Feb.	119	121	132
RETAIL SALES*	$ Billions	Jan.	17.0	16.9	16.3
Durable Goods	$ Billions	Jan.	5.6	5.6	5.7
Nondurable Goods	$ Billions	Jan.	11.4	11.3	10.6
Dep't Store Sales	1947-'9-100	Jan.	132	138	133
MANUFACTURERS'					
New Orders—Total*	$ Billions	Jan.	24.2	25.1	28.9
Durable Goods	$ Billions	Jan.	10.6	11.4	14.2
Nondurable Goods	$ Billions	Jan.	13.6	13.7	14.8
Shipments*	$ Billions	Jan.	26.3	26.7	30.0
Durable Goods	$ Billions	Jan.	12.6	13.1	14.9
Nondurable Goods	$ Billions	Jan.	13.6	13.6	15.0
BUSINESS INVENTORIES, END MO.*	$ Billions	Jan.	90.0	90.7	89.3
Manufacturers'	$ Billions	Jan.	52.9	53.5	52.4
Wholesalers'	$ Billions	Jan.	12.6	12.7	12.9
Retailers'	$ Billions	Jan.	24.5	24.5	24.0
Dept. Store Stocks	1947-'9-100	Jan.	147	150	151
CONSTRUCTION TOTAL	$ Billions	Feb.	3.1	3.3	3.0
Private	$ Billions	Feb.	2.3	2.4	2.2
Residential	$ Billions	Feb.	1.1	1.1	1.0
All Other	$ Billions	Feb.	1.2	1.3	1.2
Housing Starts*—a	Thousands	Feb.	890	1,030	935
Contract Awards, Residential—b	$ Millions	Jan.	777	757	817
All Other—b	$ Millions	Jan.	1,289	1,224	1,483
EMPLOYMENT					
Total Civilian	Millions	Feb.	62.0	62.2	63.2
Non-Farm	Millions	Feb.	50.3	51.0	51.7
Government	Millions	Feb.	7.5	7.5	7.3
Trade	Millions	Feb.	11.3	11.5	11.2
Factory	Millions	Feb.	11.8	12.1	13.1
Hours Worked	Hours	Feb.	38.5	38.6	40.2
Hourly Earnings	Dollars	Feb.	2.10	2.10	2.05
Weekly Earnings	Dollars	Feb.	80.85	81.06	82.41
PERSONAL INCOME*	$ Billions	Feb.	342	344	339
Wages & Salaries	$ Billions	Feb.	235	237	236
Proprietors' Incomes	$ Billions	Feb.	51	51	51
Interest & Dividends	$ Billions	Feb.	32	32	31
Transfer Payments	$ Billions	Feb.	24	23	20
Farm Income	$ Billions	Feb.	16	16	16
CONSUMER PRICES	1947-'9-100	Jan.	122.3	121.6	118.2
Food	1947-'9-100	Jan.	118.2	116.1	112.8
Clothing	1947-'9-100	Jan.	106.9	107.6	106.4
Housing	1947-'9-100	Jan.	127.1	127.0	123.8
MONEY & CREDIT					
All Demand Deposits*	$ Billions	Jan.	104.6	104.9	106.5
Bank Debits*—g	$ Billions	Jan.	84.4	80.8	83.4
Business Loans Outstanding—c	$ Billions	Jan.	30.6	32.3	30.3
Instalment Credit Extended*	$ Billions	Jan.	3.5	3.6	3.5
Instalment Credit Repaid*	$ Billions	Jan.	3.4	3.5	3.3
FEDERAL GOVERNMENT					
Budget Receipts	$ Billions	Jan.	4.8	6.0	4.8
Budget Expenditures	$ Billions	Jan.	6.0	5.8	6.1
Defense Expenditures	$ Billions	Jan.	3.5	3.6	3.7
Surplus (Def) cum from 7/1	$ Billions	Jan.	(8.0)	(6.7)	(7.0)

PRESENT POSITION AND OUTLOOK

do—steel output is likely to rise, as inventories gradually bottom out.

The second quarter is thus likely to see a criss-cross production pattern, dominated by declines but with emerging increases as the inventory phase of the current recession begins to wane.

* * *

CAPITAL OUTLAYS—the much heralded 1958 decline in business spending for plant and equipment is spelled out in gloomy detail in the Department of Commerce's annual March survey of businessmen's expected outlays. According to the latest available figures, spending for new productive facilities reached a peak annual rate of $37.8 billion in the third quarter of 1957; it is evidently going to average about $33 billion in the first half of 1958, and perhaps about $31 billion in the last half. This would be far and away the sharpest drop in the rate of capital outlays since prior to World War II. Moreover, there is plenty of evidence that the planned rate of outlays for 1958 is still subsiding, in November, businessmen expected to spend at a $35.5 billion rate in the first quarter; by February they had reduced their spending sights to a $34.0 billion rate.

In watching the decline of capital outlays, bear this fact in mind. For the past several years, businessmen have had to face up to a 10%-per-year increase in the price of plant and equipment. Faced with that rate of rise in prices, many concluded it was wise to purchase now, at current prices. Result: a hefty, advance purchase of capital goods, and substantial excess capacity. This lends support to the argument that the results of the Commerce Department's survey are not just a statistician's bad dream, but a major, real, bearish trend of 1958.

* * *

CONSUMER OUTLAYS — to compound the news of decline in capital goods markets reported by the Department of Commerce, The Federal Reserve, in its annual survey of consumer expectations prepared by the University of Michigan, finds increased consumer pessimism, and notable reductions in the rate at which consumers plan to buy new cars and homes in 1958. These results are also significant: they confirm the obvious unhappiness in Detroit, and they cast some doubt on the thesis that easy money alone is going to send the housing market up into the 1.5-million region. On the other hand, it is worth noting that consumer expectations are volatile, and

and Trends

QUARTERLY STATEMENT FOR THE NATIONAL ECONOMY

In Billions of Dollars—Seasonally Adjusted, at Annual Rates

SERIES	1957 IV Quarter	1957 III Quarter	1957 II Quarter	1956 IV Quarter
GROSS NATIONAL PRODUCT	433.0(e)	439.0	434.3	426.0
Personal Consumption	282.5(e)	283.6	278.9	272.3
Private Domestic Invest.	61.0(e)	65.5	65.0	68.5
Net Foreign Investment	2.5(e)	3.2	3.5	2.4
Government Purchases	87.0(e)	86.7	86.9	82.8
Federal	50.0(e)	50.6	51.1	49.0
State & Local	37.0(e)	36.1	35.8	33.9
PERSONAL INCOME	344.5(e)	346.5	342.4	334.5
Tax & Nontax Payments	43.5(e)	43.6	42.9	40.5
Disposable Income	301.0(e)	302.9	299.5	294.0
Consumption Expenditures	282.5(e)	283.6	278.9	272.3
Personal Saving—d	18.5(e)	19.3	26.6	21.7
CORPORATE PRE-TAX PROFITS	40.3(e)	41.8	42.0	45.6
Corporate Taxes	20.5(e)	21.3	27.4	23.3
Corporate Net Profit	19.8(e)	20.5	20.5	22.3
Dividend Payments	11.7(e)	12.6	12.5	11.5
Retained Earnings	8.1(e)	7.9	8.0	10.8
PLANT & EQUIPMENT OUTLAYS	35.5(e)	37.8	37.0	36.5

THE WEEKLY TREND

	Unit	Week Ending	Latest Week	Previous Week	Year Ago
MWS Business Activity Index*	1935-'9-100	Mar. 8	269.9	271.5	290.3
MWS Index—per capita*	1935-'9-100	Mar. 8	202.9	204.2	222.6
Steel Production	% of Capacity	Mar. 16	54.2	52.8	99.5
Auto and Truck Production	Thousands	Mar. 15	112	109	172
Paperboard Production	Thousand Tons	Mar. 8	266	264	280
Paperboard New Orders	Thousand Tons	Mar. 8	321	289	303
Electric Power Output*	1947-'49-100	Mar. 8	227.6	229.0	228.4
Freight Carloadings	Thousand Cars	Mar. 8	544	554	672
Engineering Constr. Awards	$ Millions	Mar. 10	313	365	412
Department Store Sales	1947-'9-100	Mar. 8	105	100	98
Demand Deposits—c	$ Billions	Mar. 5	54.5	54.9	55.8
Business Failures	Number	Mar. 6	358	331	327

PRESENT POSITION AND OUTLOOK

can be easily reversed by favorable developments (such as price reductions). The news from the consumer sector is thus not nearly as conclusive or significant as the news from the business sector on capital spending; decisions to buy or not to buy whole plants are long in the making, and not easily turned around.

* * *

WEATHER AND STATISTICS—In February, snow blanketed a large part of the country for a large part of the month. Result: retail sales took a hefty drop, and so did residential building starts. Conversely, chilly homeowners hiked outlays for fuel oil and electric power.

In March, assuming reasonable weather, these trends are doubtless swinging around. Retail sales will be better (with an early Easter being an additional helpful influence); housing starts will doubtless show a substantial gain as starts delayed from February are added to the figures; electric power output is already down sharply from February, and fuel oil sales are off. There's no good way of figuring the weather, but it would be wise to write off some of the March improvements from February just as it would be wise not to place great emphasis on the February declines. **Trade and housing were not as bad as they seemed in February; they aren't as good as they look in March.**

*—Seasonally adjusted. (a)—Private starts, at annual rates. (b)—F. W. Dodge unadjusted data. (c)—Weekly reporting member banks. (d) Excess of disposable income over personal consumption expenditures. (e)—Estimated. (f)—Estimated by Council of Economic Advisors. (g)—337 non-financial centers. (na)—Not available. (r)—Revised. Other Sources: Federal Reserve Bd., Commerce Dept., Securities & Exch. Comm., Budget Bureau.

THE MAGAZINE OF WALL STREET COMMON STOCK INDEXES

No. of Issues (1925 Cl.—100)	'57-'58 Range High	'57-'58 Range Low	1958 Mar. 7	1958 Mar. 14
300 Combined Average	346.6	270.4	300.7	304.4
4 Agricultural Implements	282.4	181.9	207.4	205.5
3 Air Cond. ('53 Cl.—100)	122.8	82.7	94.7	98.2
9 Aircraft ('27 Cl.—100)	1388.8	882.6	992.0	992.0
7 Airlines ('27 Cl.—100)	1022.5	581.5	721.6	721.6
4 Aluminum ('53 Cl.—100)	464.5	253.4	291.4	306.6
6 Amusements	172.6	119.0	138.0	139.2
8 Automobile Accessories	384.4	284.7	304.6	307.5
6 Automobiles	54.3	38.1	41.9	41.9
4 Baking ('26 Cl.—100)	32.1	26.3	31.2	32.1H
4 Business Machines	1285.3	863.7	941.4	950.1
6 Chemicals	652.3	469.7	535.2	540.3
5 Coal Mining	25.1	16.8	18.9	19.1
4 Communications	106.0	83.1	91.6	92.4
9 Construction	126.8	100.7	118.0	122.1
7 Containers	799.9	656.5	769.1	776.0
7 Copper Mining	307.6	179.7	201.1	212.0
2 Dairy Products	127.1	103.8	127.1	126.0
6 Department Stores	89.2	75.1	85.6	84.1
5 Drugs-Eth. ('53 Cl.—100)	261.6	175.2	252.3	261.6H
6 Elec. Eqp. ('53 Cl.—100)	244.4	183.3	205.3	205.3
2 Finance Companies	635.7	525.0	624.5	630.1
6 Food Brands	283.1	239.8	283.1	280.6
3 Food Stores	204.1	153.8	200.4	204.1H

(Nov. 14, 1936 Cl.—100)	'57-'58 Range High	'57-'58 Range Low	1958 Mar. 7	1958 Mar. 14
100 High Priced Stocks	236.9	185.8	200.3	202.2
100 Low Priced Stocks	415.9	311.7	356.1	360.7
5 Gold Mining	762.2	515.0	648.9	643.8
4 Investment Trusts	184.5	137.5	151.3	149.9
3 Liquor ('27 Cl.—100)	1094.5	855.7	967.1	976.1
8 Machinery	523.4	338.6	350.7	357.6
3 Mail Order	174.6	135.2	169.0	174.4
4 Meat Packing	146.8	103.5	131.4	146.8H
5 Metal Fabr. ('53 Cl.—100)	198.3	131.6	155.7	154.4
9 Metals, Miscellaneous	420.9	263.1	294.7	299.9
4 Paper	1060.1	789.9	867.1	875.5
22 Petroleum	914.4	629.7	674.7	674.7
21 Public Utilities	276.8	236.5	274.2	276.8H
7 Railroad Equipment	91.4	54.8	63.6	64.7
20 Railroads	72.7	41.7	45.5	46.3
3 Soft Drinks	519.9	432.7	519.9	515.5
12 Steel & Iron	393.0	235.8	273.3	270.9
4 Sugar	116.9	96.9	106.7	105.7
2 Sulphur	926.7	521.2	581.0	613.3
10 Television ('27 Cl.—100)	36.0	27.2	31.3	31.6
5 Textiles	149.9	96.7	114.8	117.7
3 Tires & Rubber	197.6	147.0	153.2	153.2
5 Tobacco	127.9	87.0	121.5	127.9H
2 Variety Stores	298.8	219.5	263.4	263.4
17 Unclassif'd ('49 Cl.—100)	168.9	137.2	156.4	156.4

H—New High for 1957-1958.

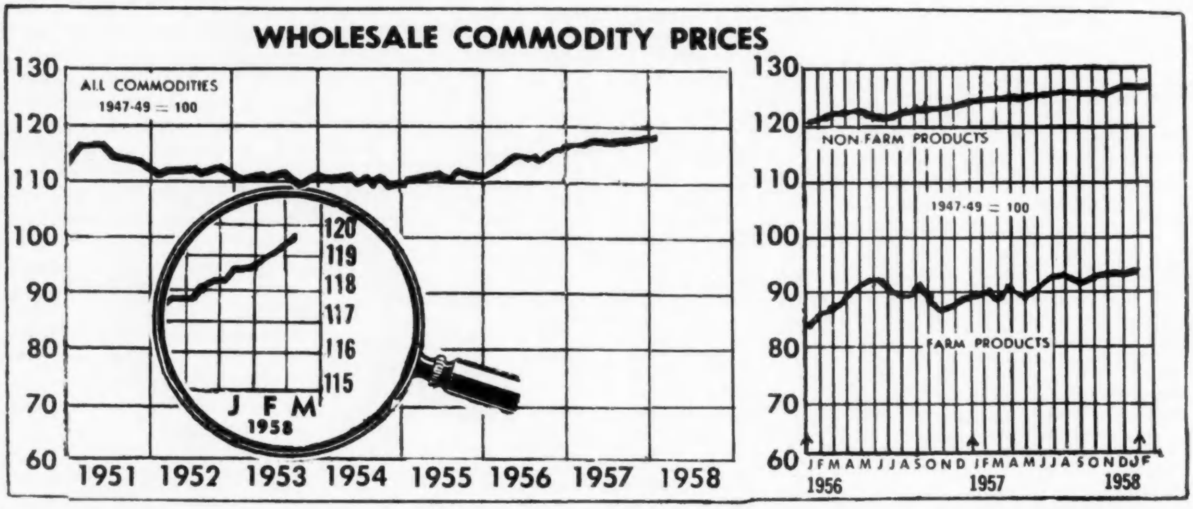
Trend of Commodities

SPOT MARKETS—Sensitive commodities were little changed in the two weeks ending March 14. The Bureau of Labor Statistics' daily index of 22 leading commodities rose 0.1%, thanks to further strength in raw foodstuffs. Raw industrial materials continued to lag, falling 0.2% during the period. In this category, metals were down 0.6% while textiles and fibers receded 0.2%.

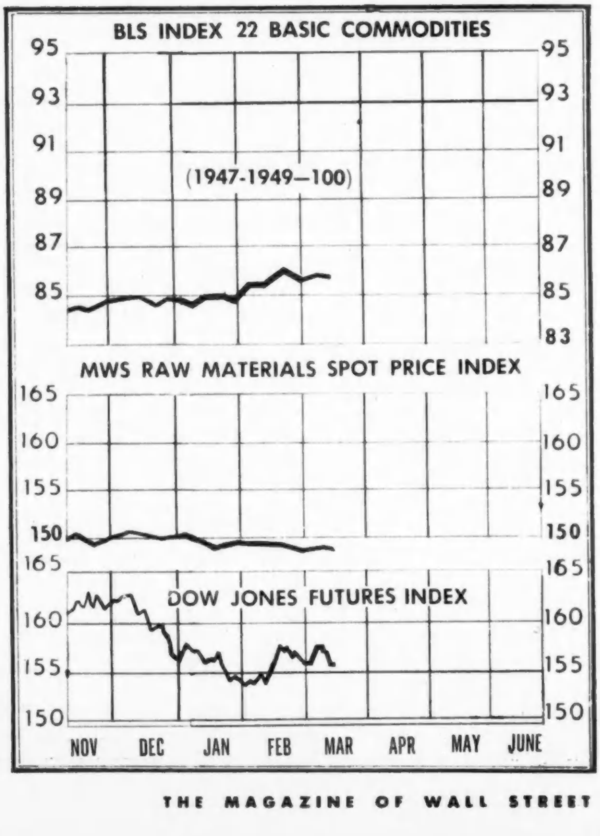
While most raw materials are far from their peaks, and still declining, finished goods remain firm. This is reflected in the BLS comprehensive price index of commodities other than farm products and foods, which rose 0.1% in the two weeks ending March 11 and is only a hair under its all-time peak. Apparently producers find it preferable to hold the priceline, even at the expense of higher sales.

FUTURES MARKETS—Futures were a mixed lot in the first two weeks of March, with no clear trend in evidence. The Dow-Jones Commodity Futures Index fell 0.45 points during the period, with pronounced weakness in cocoa affecting this average.

Wheat futures were mixed in the two weeks ending March 14, with old crop futures trending higher while the new crop options lost ground. News developments during the period were mainly responsible for the divergence. The old crop benefited from the loan figures which showed that a net of 240 million bushels were put into the support program through January 31, last day for such entries. This compares with 181.3 million bushels a year ago. With redemptions low, some tightness later in the season appears in prospect.



BLS PRICE INDEXES 1947-49—100	Date	Latest Date	2 Wks. Ago	1 Yr. Ago	Dec. 6 1941
All Commodities	Mar. 11	119.6	119.2	116.9	60.2
Farm Products	Mar. 11	100.1	97.3	88.8	51.0
Non-Farm Products	Mar. 11	125.9	125.8	125.4	67.0
22 Basic Commodities	Mar. 14	85.7	85.6	89.0	53.0
9 Foods	Mar. 14	89.3	88.9	81.0	46.5
13 Raw Ind'l. Materials	Mar. 14	83.1	83.3	84.9	58.3
5 Metals	Mar. 14	85.4	86.0	110.9	54.6
4 Textiles	Mar. 14	76.9	77.1	83.3	56.3



MWS SPOT PRICE INDEX

14 RAW MATERIALS
1923-1925 AVERAGE—100

AUG. 26, 1939—63.0 Dec. 6, 1941—85.0

	1958	1957	1953	1951	1945	1941
High of Year	150.2	166.3	162.2	215.4	98.9	85.7
Low of Year	148.4	149.5	147.9	176.4	96.7	74.3
Close of Year		150.0	152.1	180.8	98.5	83.5

DOW-JONES FUTURES INDEX

12 COMMODITIES
AVERAGE 1924-1926—100

	1958	1957	1953	1951	1945	1941
High of Year	158.2	163.4	166.5	214.5	106.4	84.6
Low of Year	154.1	153.8	166.8	189.4	105.9	84.1
Close of Year		156.5	147.9	176.4	96.7	74.3

Lockheed Management answers your questions about:

Lockheed's Activities in Research and Development

1. How extensive is Lockheed's research and development program?

Lockheed is presently engaged in research and development activities that probably are the broadest in the aircraft industry. During 1958 Lockheed will be pushing ahead on nearly 100 challenging research and development projects—ranging from highly ingenious manned aircraft designs to studies of ion and other forms of atomic propulsion of air and space vehicles and remote guidance of unmanned space ships.

Lockheed's intensive missile research is reflected in rapidly increased sales. Missile sales represented 8% of Lockheed's all-time record business of more than $900 million in 1957. This proportion is expected to climb to 20% or better in 1958 as work is accelerated on various Missile Systems Division programs, including the U.S. Navy's long range fleet ballistic missile, POLARIS, for which Lockheed is the prime contractor.

In the field of atomic power, Lockheed's Georgia Division and the U.S. Air Force are constructing the nation's largest laboratory for nuclear aircraft research and testing of radiation effects on aircraft systems. This Lockheed-operated Air Force research center is being constructed on a 10,000-acre site near Dawsonville, Georgia, and will go into service early in 1959.

Lockheed also has devised plans to enter another nuclear field—the design and manufacture of atomic reactors as a source of commercial and industrial power and heat.

2. Which of Lockheed's R&D projects has the biggest potential for near-future production contracts?

The POLARIS *Fleet Ballistic Missile:* Recent history-making technological events have given added impetus to the development of this top-priority U.S. Navy missile. The 1500-mile range of the POLARIS, combined with the Navy's world-wide mobility, could subject virtually any military target on earth (including submarine pens and bases) to swift and devastating retaliatory action from the sea—independent of fixed launching sites.

Lockheed is missile system manager on the POLARIS program, and has already received $130 million in contracts—for pre-production development work on the POLARIS. There is every assurance that Lockheed will receive production contracts for the POLARIS in large quantities—as this solid propellant space-age missile fills a vital need in our nation's total defense program. (See POLARIS organization chart, opposite page.)

3. What is Lockheed's position in the field of electronics research and development?

Lockheed's pioneering leadership in airborne electronics—and the fact that Lockheed has designed and built more Anti-Submarine Warfare and Airborne Early Warning radar planes than any other company—will continue to be an important source of new contracts for Lockheed.

Lockheed's policy, in the past, has been to do the design and development work on airborne electronics—working alone or in close co-operation with various electronics manufacturers—and to leave the actual production manufacturing to firms specializing in this field. Today, however, Lockheed management is studying the acquisition of an electronics manufacturing facility of its own because the increasing complexity and costliness of today's airborne electronics require a better integrated working relationship. Too, with Lockheed manufacturing its own electronics gear and components it would be better able to control production schedules and fulfill contract commitments.

4. What areas of advanced research is Lockheed presently engaged in?

The following list is necessarily incomplete, due to the omission of those research projects which by their mere listing would reveal their significance and thereby violate security:

1. *Effects of gravity on electrical flow (outer space communication)*

2. *Superconductivity of materials at low temperatures (relative to manned space flight)*

3. *Hydromagnetic shock waves—100,000 mph, 100,000 degrees centigrade—to study flow of ionized gases at extreme Mach numbers (relative to ion engines for space travel)*

4. *Study of opacity of air (and effects on very high speed flights in atmosphere)*

5. *Cosmic ray investigation (space flight)*

6. *Ion propulsion (of space vehicles)*

7. *Physiological endurance limits in outer space travel (man's capacity to cope with new environmental sensations and hardships)*

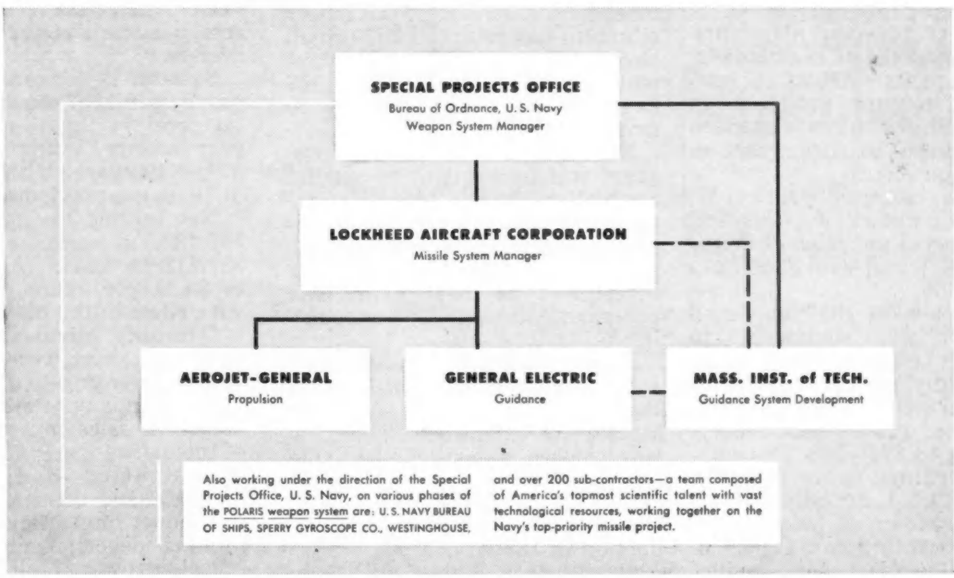
8. *Infrared radiation studies (leading to instruments for collision avoidance of manned aircraft)*

9. *Advanced astronautics (navigation in space)*

10. *Solar energy studies (leading to electrical power for radio transmission of data from orbiting satellites)*

Lockheed, always in the forefront of technological developments, is expanding its research activities to include new frontiers. In Lockheed's vast laboratories, a dedicated staff of scientists is working to improve the world we live on, and to achieve new miracles in man's swift conquest of outer space.

This is the task force developing the POLARIS—new Fleet Ballistic Missile for the U. S. Navy:



LOCKHEED *means leadership*

Answers to Inquiries

The Personal Service Department of THE MAGAZINE OF WALL STREET *will* answer by mail or telegram, a reasonable number of inquiries on any listed securities in which you may be interested or on the standing and reliability of your broker. The service in conjunction with your subscription should represent thousands of dollars in value to you. It is subject to the following conditions:

1. Give all necessary facts, but be brief.
2. Confine your requests to *three listed securities at* reasonable intervals.
3. No inquiry will be answered which does not enclose *stamped, self-addressed envelope.*
4. No inquiry will be answered which is mailed in our postpaid reply envelope.
5. Special rates upon request for those requiring additional service.

Kaiser Aluminum & Chemical Corp.

"I am a reader of your Magazine of Wall Street and find it excellent. I am interested in receiving late earning data on Kaiser Aluminum & Chemical. With thanks."

R. D., Santa Barbara, California

Kaiser Aluminum & Chemical Corp. is the third largest U. S. producer of primary aluminum. Rapid progress has been made by Kaiser since its start as an integrated aluminum producer in 1946. Facilities have expanded greatly, large bauxite reserves have been acquired.

For the calendar year 1957, Kaiser Aluminum & Chemical Corp. reported net sales of $391,627,210 compared with $343,626,585 for 1956.

Net income for 1957 amounted to $26,829,237, equivalent to $1.58 per common share after preferred dividend requirements. This figure included favorable adjustments of prior years' income amounting to $743,502. The comparable earnings figure for 1956 was $42,349,131, including favorable adjustments of prior years' income amounting to $4,806,986. The 1956 earnings were equivalent to $2.71 per share.

Fourth quarter earnings were abnormally depressed by several factors. Among these were the loss of primary production and heavy reactivation expense following an unauthorized work stoppage at the corporation's Chalmette reduction plant near New Orleans. At the Mead and Tacoma plants in the Northwest, lower water levels on the Columbia River forced curtailment of interruptible power and required the purchase of high-cost replacement power. Although the power situation has returned to normal, two potlines at the Mead plant which were shut down in late 1957 have not been reopened due to market conditions.

The current expansion program will be brought to virtual completion during 1958. Capital expenditures will total approximately $55 million during the year, compared with a peak dollar investment in new plant and equipment during 1957 amounting to $229,343,107.

Major units of the aluminum sheet and foil reroll facilities at Ravenswood, West Virginia, are already in operation. The new Ravenswood reduction plant, using coal-derived electrical energy, is also in operation. The second potline at Ravenswood began production in January.

During 1958, Kaiser will begin to realize direct competitive advantages from its water-based transport route extending from bauxite mines in Jamaica to alumina plants on the Mississippi River and to the combined aluminum reduction and rolling mill facilities on the Ohio River at Ravenswood, West Virginia. This installation is located within a 500-mile radius of 70% of the total U.S. aluminum market. Shipments of its mill fabricated aluminum products have shown a definite uptrend since the 1957 year-end, with increases registered in both January and February, according to the company.

Dividends in 1957 totalled 90 cents per share and 22½ cents quarterly has been paid thus far this year.

American Optical Co.

"As a subscriber to your magazine, I would like some information on American Optical Co."

S. O., Peru, Indiana

American Optical Co. is prominent in the ophthalmic and optical products industry, record of earnings is good. The company had a prominent role in the development of the Todd-AO wide-screen motion picture projection system.

Sales of American Optical Co. products in 1957 reached the highest level in the company's 125-year history, rising to $78,184,374, as compared with $75,691,884 in 1956, the previous record high.

Net income in 1957 was $2,550,422, as compared with $2,389,612 in 1956. This amounted to $3.21 per share as compared with $3.02 in the previous year.

Quarterly dividends totalling $2.00 per share were declared in 1957, amounting to $1,587,303.

The company attributed the increase in sales to a combination of intensified market research, reorganization of distribution methods, and continued progress in product improvement and new product development. The total reflects growth in all of the company's product divisions—Ophthalmic, Instrument and Safety Sunglass—as well as the sales volume of its subsidiary, J. W. Zecker, Inc., reported for the first time

(*Please turn to page* 56)

Beneficial Reports for 1957

Beneficial Finance SYSTEM

- more money loaned to families than ever before
- total assets exceed $500,000,000
- annual earnings at new high

The year 1957 was a good year for Beneficial with net Instalment Notes Receivable up $50 million to a new high total of $492 million at the year-end. Earnings exceeded $20 million and assets passed the half-billion-dollar mark.

The Beneficial Finance System through 1,089 offices, the largest system of its kind in the world, makes small loans generally to families to help through temporary financial emergencies with instalment repayments to come from future wages or salaries. Volume of loans in 1957 exceeded three-quarters of a billion dollars.

. . . a BENEFICIAL loan is for a beneficial purpose.

HIGHLIGHTS	1957	1956
Net Income	$ 20,152,232	$ 18,685,686
Net Income per Common Share (adjusted to present capitalization)	$1.91	$1.76
***Cash Dividends per Common Share**	$1.00	$1.00
Total Assets	$511,768,524	$462,492,129
Amount of Loans Made	$754,673,124	$739,041,925
Number of Offices	1,089	1,023
Instalment Notes Receivable *(after deducting Unearned Discount)*	$492,742,936	$442,283,634

*Cash dividends actually paid on the Common Stock were $1.00 per share for 1957 and 1956. Adjusted to present capitalization, such per share amounts were equal to $.95 and $.85, respectively.

The information contained herein should be read in conjunction with the financial statements and notes appearing in the 1957 Annual Report to Stockholders. A COPY OF THE REPORT WILL BE FURNISHED UPON REQUEST.

Beneficial Finance Co.

Beneficial Building, Wilmington, Delaware

MORE THAN 1,000 OFFICES IN THE UNITED STATES, CANADA, HAWAII AND ALASKA

Companies Involved in Tremendous Advances in Plastics

(*Continued from page* 17)

of the element fluorine into the structure of plastics has led to fluorocarbon plastics so inert that they are unaffected by such strong chemicals as acids, alkalis and solvents that chew away at other plastics. These fluorocarbons also perform well at extremes of temperature and have desirable electrical properties. Despite fluorocarbons' high cost, producers such as Du Pont and Union Carbide have achieved good volume in tough chemical and electrical applications requiring outstanding resistance to high temperatures and corrosive environments.

Rounding out the list of thermoplastic resins are the terephthalate esters known as Dacron and Mylar (Du Pont). These can be fashioned into the toughest films known and are being used in the electrical industry and as a laminate to impart strength, abrasion-resistance, and corrosion-resistance to films and sheets of other materials.

A new type of resin introduced last year by General Electric is polycarbonate. GE's product, called Lexan, has properties suggesting uses in the electrical industry, and it is also said to be tough enough to replace metal in some jobs. Other companies working on such products are Bayer of Germany and Eastman.

"Workhorses" of the Industry

The thermosetting resins are generally known as the "workhorse" products of the plastics industry, filling wide industrial needs often obscured from public notice. Among the oldest are phenolics, and they are the largest, approaching one-half billion pounds a year. Such companies as Union Carbide, Durez Division of Hooker Electrochemical, Allied, General Electric and Monsanto produce phenolics for use in electrical applications in plugs, motor components and an infinite variety of uses in various industrial and consumer fields. Newer uses include small hollow balls that float on oil or gasoline tanks to cut down on evaporation, and parts for today's high-speed and high-heat aircraft and missiles.

Largest producers of phenolic's near-cousins, the ureas and melamines, are American Cyanamid and Allied Chemical's Barrett Division. Others producing this class, called amino plastics, include Borden and Catalin. Melamines go into plastic dinnerware, an outlet that has been given a big boost by the development of "molded in" designs; electrical components requiring arc resistance; buttons and adhesives.

New Uses for Plastics

One of the glamorous new outlets for plastic materials is reinforced plastic for aircraft and missiles, appliances, boats, large auto body parts, truck bodies, luggage, large tanks, flat and corrugated panels for construction, and furniture. Generally the plastics used are polyesters reinforced with glass fibers for structural strength, but other resins are also used. Last year polyester production totaled some 95 million pounds, and reinforced plastics, about 168 million pounds, a substantial increase for both over the previous year. A host of companies make polyesters since the technology is well known, and an even greater number of fabricators make reinforced plastics. But manufacture of reinforced plastic parts is still largely characterized by expensive, custom-type techniques, and full realization of their potential awaits development of better engineered methods of production.

Silicones are war-developed materials which have outstanding resistance to heat, yet remain flexible at Arctic temperatures, are excellent insulators and have unusual water repellency. Dow Corning, General Electric and Union Carbide make these resins for electrical insulation and for oil-resistant gaskets and seals for the aircraft and automotive industries.

Growth Assured

Many of the plastics developments that have brought the industry to its present high level were spurred on by the demands of the war for new materials with special properties. The present drive for technological answers in many fields—nuclear energy, electronics, missiles and space travel—poses even greater demands of a similar nature. While the newer metals will undoubtedly fill many of these requirements, the advantages of plastics and the newfound keys to tailor-made chemical structures with specific properties, will keep attention focused on plastic materials. Of special interest along these lines is the announcement last week that the Tube Turns Company, a division of National Cylinder Gas, has been awarded a navy contract for the production of plastic cartridge cases for naval shells. The process used in this production was developed by Borg-Warner Corporation.

Many of the products now in the development stage will achieve commercial stature and full exploitation of the new polymerization techniques will bring forth tougher, better plastics. Such advances point to an annual output of 5.5 to 6.0 billion pounds of plastics and resins by 1960. —END

Which Policy On 1958 Dividend Casualties

(*Continued from page* 14)

of risk at the present time.

The air transport business presents the paradox of a growth industry with declining profits, due to rising costs and inadequate rates under government regulation.

American Airlines represents the largest air transport system in this country. It operates under a non-subsidy mail rate. It has an outstanding record of growth in revenues, mainly from passenger business. Nothwithstanding higher revenues last year, earnings declined drastically, mainly as a result of increasing costs without rate relief. Recently, the CAB granted the domestic airlines a small rate increase, as a temporary measure, pending completion of its prolonged study of the rate structure of the industry. Excluding non-recurring profits from sale of equipment, earnings for the year 1957 declined to \$1.08 per share from \$2.24 in 1956. In the fourth quarter of last year, similar earnings amounted to only 1¢ per share, as against 26¢ a year previous. Thus, continuation of the 25¢ quarterly dividend (last paid on March 1st) is open to considerable doubt. Further, American

Airlines, as in the case of other companies in the industry, is facing the change-over to jet aircraft. This will probably call for further financing, which in turn will require improved earnings. The latter will depend, to an important extent, on worthwhile rate relief. Therefore, in summary, the picture presents a substantial degree of speculative uncertainty, despite the decline in the price of the stock.

The chemical industry is generally classified as a growth industry and, subject to temporary interruption, most companies in this field have shown a rising trend in earning power. Therefore, it is of interest to review the dividend outlook of a chemical company with sharply declining earnings.

Commercial Solvents reduced the quarterly dividend from 25¢ per share to 17.5¢ with December payment and has recently cut the rate again to 12.5¢ payable in March. For the year 1957, earnings declined to 53¢ per share from $1.21 in 1956. In the second and third quarters of last year, earnings were only 19¢ and 15¢ per share respectively. Indicated fourth quarter results were equivalent to a deficit of 7¢ per share. The year 1957 was adversely affected by a combination of factors, including rising costs of materials and wages with competitive conditions that prevented offsetting price increases. This resulted in a cost-price squeeze and profits suffered accordingly, notwithstanding higher sales. The company produces various industrial, agricultural and pharmaceutical chemicals. Its output includes antifreeze items, bonded whiskies and other products. It is engaged in a diversification and expansion program. Nevertheless, the company is still dependent to an important extent on alcohol, which is subject to wide price swings. Therefore, the stock is, at least to some extent, speculative in character. Continuation of even the reduced dividend is open to doubt.

The textile industry has a record of wide cyclical swings, with alternating periods of prosperity and depression. It is also highly competitive. The downtrend that started in mid-1956 has continued thus far into 1958. This has already been longer than prior downward phases of the broad textile cycle. As rayon is an im-

portant division of the industry, we may comment on a leading company in this field that has recently passed its dividend.

Industrial Rayon reduced the quarterly dividend from 75¢ to 50¢ per share last June. The rate was again cut to 25¢ per share in September. The same amount was paid in December, but this proved to be only a pause in the diminishing return to stockholders. At the February 19th meeting, directors passed the March dividend. The official statement read: "Reflecting current business conditions which have continued to deteriorate in the present year to date, and the need to conserve cash to meet expenditures of considerable sums for programs now under consideration, our Board of Directors took no action in respect of a dividend payment in the first quarter of 1958." In the year 1957, earnings declined to 65¢ per per share, from $2.45 in 1956 and $5.77 in 1955. The decline in profits resulted in a deficit equivalent to 11¢ per share in the final six months of last year. In its 1957 annual report, the company stated: "Reduced earnings were due not only to competitive pressures on selling prices but also to increased costs." Industrial Rayon's products are divided into three groups: (1) rayon tire cord; (2) continuous filament textile rayon; (3) nylon staple fiber. For several years, rayon tire cord has represented between two-thirds and three-fourths of total sales. Its nylon staple fiber output is not the type of nylon used in tires. The company's large position in rayon used for tires appears to be threatened, at least to some extent, by the growing use of tire nylon made by other manufacturers. Intensified competition and price cutting in tire yarns has held down the company's profit margin. This important division, as well as its textile activities, are also being adversely affected by the general business recession. In its 1957 annual report issued recently, the company stated that "the current textile market is reported to be at a reduced level in comparison with both a year ago and the fourth quarter of 1957." In brief, it is difficult to see how the bad news could be worse in the case of this company. The stock has declined from a 1955 high of 58¾ to a current price of around 16. Despite this drastic decline, the stock must be viewed as an issue still presenting speculative risk. Resumption of dividends is not in immediate prospect.

In the above discussion, we have covered companies in six industries that have been in a recessionary trend for some time or that are just entering a period of adjustment. The two tables accompanying this article, cover a wide range of stocks in a number of industries and contain appropriate statistical data, including prices, earnings, and dividends. The reader may wish to study these tables, particularly stocks with narrowing dividend coverage. In the latter group, future dividend casualties may be found. Further articles on various industries will appear in future issues showing declining earnings and dividend trends. —END

Varying Prospects for Business Machine Companies

(*Continued from page* 29)

significant development in the brief history of computers. Large retail organizations have made attempts at automating their accounting procedures, but so far the results have been limited. The same is true of insurance companies. But the combination of banking success and ERA may well change the picture radically.

Military Demand Strong

Heading the list of customers for the nation's computer producers is the Department of Defense. There is no longer any argument that without computing machines, large and small, the whole field of missilry, and the launching of successful earth satellites would be practically non-existent. In addition to the large computers used to solve the astronomical calculations required for production and planning, most missiles use miniature computers as the heart of their guidance systems. Moreover, the vital problem of tracking earth satellites and computing their orbits would be inordinately more difficult if observed data could not be fed into computers for quick calculation.

As the missile program moves into full swing, demand for electronic brains will necessarily grow, but again, profit potential is small for most manufacturers. Research costs, even if the lion's share is borne by the government, are high, and production runs are small, denying the producers the cost advantages of mass production.

There is some hope for greater profitability from Defense Department business in new plans to subject inventory control and replacement parts to the same type of data processing systems that have met with such success among large industrial companies. Maintenance of weapons and equipment has climbed to the fabulous sum of $20 million a day, and much of the cost has been traced to clerical and paperwork difficulties involved in maintaining global service and supply operations.

But in any event, the major portion of military procurement of computers will be the low-profit weapons systems that are still the backbone of the industry's business.

With the overall demand for computers and conventional equipment softer than it has been for some time, many of the smaller companies in the field are going to travel a bumpier profits road in 1958. **IBM,** the industry leader and by far its most dominant member seems best situated to weather any difficulties, however. The company's products cover a wide field, ranging from typewriters through complete data processing systems and all types of computers. IBM is also a major defense contractor and one of the principal participants in the Defense Department's SAGE air defense system.

The company reports some resistance to its computers among smaller buyers and increasing competitive pressures from the growing number of producers in the field, but so far there has been no significant drop in new orders.

As a growth issue, IBM has been outstanding, and its 1957 record added to its stature. Gross revenues advanced more than 35 per cent, and per share earnings climbed 18 per cent, amounting to $7.73 against $6.55 in 1956. A further advance in revenues seems in prospect in 1958, although profit margins may be under some pressure from heavy research costs and increasing competition.

Sperry-Rand, the second largest producer in the field, is also a well diversified organization actively engaged in instrumentation, control systems and aircraft and construction equipment in addition to its place as a major computing machine manufacturer. Sperry's Univac is one of the most popular of the larger machines and has found extensive use in industry as well as the defense program. Sperry's importance in the Defense program is further attested to by its receipt last month of a prime contract for the new Sergeant missile to replace the now obsolete Corporal.

Sales have been in a steady uptrend for the last few years, but organizational difficulties in connection with the corporate marriage of the old Sperry Corp. and Remington-Rand have been a drag on earnings. From $1.80 in the 1955 fiscal year per share net eased to $1.74 in 1956 and further shrinkage is expected in the year to end March 31, 1958. For the first nine months of the current year sales rose over 5 per cent, but internal problems, a slowdown in military progress payments and more competitive conditions in the construction equipment field cut net for the period to 91¢ per share from $1.18 a year earlier. For the full year, earnings of more than $1.30 cannot be expected, but with cost cutting a prime aim in current operations, and the full merger digestion period about over, margins could improve.

National Cash Register, for many years the dominant producer of cash registers passed an interesting milestone in 1957 when orders for accounting machines exceeded cash register orders for the first time in the company's history.

Principal reason for the success of new lines has been the enthusiastic reception accorded NCR's electronic bank posting machine, the Post-Tronic, but substantial progress was also shown in the merchandising of integrated data processing machines. Moreover, the company's new small data processor which will sell for under $50,000, is near the marketing stage.

Defense business accounts for only about 7 per cent of the company's revenues, making it less subject to changes in procurement procedures, but also forcing on National the necessity for financing almost all of its own research. Higher research and engineering costs, as a matter of fact, were the prime causes of the slight drop in net income in 1957 to $2.57 per share from $2.62 despite a 12 per cent increase in world-wide sales. Significant in the company's 1957 operations was the 12th successive record year recorded overseas and a noticeable increase in defense business from 2 per cent in 1956 to the current level.

Sales should continue to grow in 1958, but higher selling expenses coupled with rigid manufacturing costs may prevent margins from improving any over 1957. Nevertheless, its important lines are well established and a good reception is probable for its new products, in 1958.

Underwood Corp., after several years of profitable but basically inefficient operation, embarked on an important reorganization in 1956 and began the task of attempting to catch up with the electronic trend. In the past two years, several unprofitable lines have been dropped and huge writedowns of the losses incurred led to a deficit of $10.91 per share in 1956. In 1957 weakness in the market for typewriters near year end cut sales below last year's $85 million level, but more efficient operations cut the deficit to approximately $2.00 per share.

Nevertheless, the company's problems are still far from over. Increased promotional expenses will continue to cut into profits and the company's electronics lines have still not been tested extensively in the market. Moreover, during the year, Underwood decided to discontinue development work on large computers, a factor which reduced reported earnings for the period by over $1.5 million. Work is continuing, however, on smaller machines and on data processing equipment.

In 1958 Underwood will be faced with the hard task of improving its showing in the face of weakening market conditions for its basic products. Under the circumstances dividend resumption is not probable in the near future.

Royal McBee derives about 70 per cent of its revenues from the sale of typewriters and accessories, but data processing and other electronic equipment has risen in the last two years to where it now accounts for over 15 per cent of sales.

Earnings, reflecting heavy research costs and very high selling expenses dropped to $2.68 a share last year from $3.47 in 1956. The trend continued through the first quarter of the current fiscal year with earnings receding to 55¢ a share compared with 99¢ in the same period a year earlier. For the full year, sales will probably slide and with margins still under pressure a further earnings drop is to be expected. —END

Comparing Two Leaders in Equipment Rental Fields

(*Continued from page* 33)

which reduces materials handling costs and affords economies in sanitation and freedom from damage claims. Pneumatic materials handling devices used in conjunction with Airslide cars are being put into more and more plants in the food industry to speed production operations and reduce expenses. In addition, General American operates tank storage terminals and is engaged in the manufacture of freight cars for its own use as well as for the railroad industry.

Through the Fuller Company, another wholly owned subsidiary, GAT is prepared to construct cement plants and install special equipment. Another subsidiary specializes in manufacture and installation of machinery designed to collect dust and fumes in industrial plants. Another unit is engaged in manufacturing pressure vessels of steel, alloys and aluminum and other products used in the petroleum industry. A small concern was acquired last year to enable GAT to undertake production of hydraulically operated hatch covers.

The Louisville Dryer division is engaged in design and manufacture of drying, cooling and dewatering equipment for industries such as chemical producers. The Turbo-Mixer division also makes heavy equipment, such as evaporaters, etc.

A plastics division is among the diversified operations added to the parent company in recent years. A new type of injection process has been developed, according to management, which is expected to have wide appeal in the food industry in production of packaging. It is said to be capable of producing thin-wall plastic containers and lids for packaging foods. Portable television cabinets can be produced in the same process from fiberglass as a base. Products of this division are directed primarily to the consumer goods field and are subject to keen competition as ingenious research produces new products.

Other activities include manufacture of automatic screwdrivers and a chemical nickel-plating process. The Parker-Kalon division acquired an exclusive right to manufacture and sell a new type of tool used to automate the driving of screws by pneumatically setting the screw at the bit. This process not only increases driving speed but obtains sizeable labor economies in assembly line operations. The chemical plating plant is engaged in lining tank cars and other large vessels with special protective coatings. This activity is expected to experience long-range growth abroad.

From this brief summary, it may be seen that General American's management has sought through its expansion program to develop growth products and processes that show promiseof contributing importantly to income in years ahead and to add some activities that depend on consumer goods lines which may fare well at times when demand for freight equipment drops. In the meantime, through research in manufacturing operations, management has sought to solidify its position as a producer and lessor of specialized equipment for moving bulk materials either in liquid or granular form.

Income Data

	Gross Operating Revenues	Income Tax	Deprec. & Deplet.	Net Income	Net Profit Margin	Earnings Per Share
	(Millions)					
GENERAL AMERICAN TRANSPORTATION						
1952	$136.6	$ 6.6	$ 6.8	$ 6.4	4.7%	$3.03
1953	177.2	9.9	7.0	7.3	4.1	3.38
1954	156.2	11.5[1]	9.6	11.3	7.2	4.79
1955	167.8	11.9[1]	10.9	12.4	7.4	5.25
1956	194.9	13.2[1]	11.8	13.5	6.9	5.71
1957	220.7	15.8[1]	11.2	15.7	7.1	6.61
UNION TANK CAR						
1952	$ 25.3	$ 3.8[1]	$ 3.3	$ 4.3	17.2%	$2.03
1953	27.3	4.0[1]	3.3	4.7	17.2	2.19
1954	28.1	5.2[1]	4.2	5.1	18.2	2.39
1955	30.5	6.1[1]	5.3	6.1	20.0	2.60
1956	34.5	6.3[1]	6.4	6.4	18.6	2.40
1957	62.9	8.7[1]	9.1	8.2	13.1	2.64

Balance Sheet Data

	General American Transportation 12/31/57	Union Tank Car 12/31/57
	(Millions)	
Long Term Debt (Stated Value)	$163.8	$ 92.5
Preferred Stock (Stated Value)	None	None
No. of Common Shares Outstanding (000)	2,332	3,120
Capitalization	$169.8	$140.1
Total Surplus	$117.4	$ 38.9
Cash and Marketable Securities	$ 22.3	$ 5.8
Inventories, Net	$ 42.5	$ 14.4
Receivables, Net	$ 25.4	$ 11.6
Current Assets	$ 90.3	$ 32.5
Current Liabilities	$ 27.8	$ 16.2
Net Working Capital	$ 62.5	$ 16.3
Current Ratio (C. A. to C. L.)	3.2	2.0
Net Property	$241.3	$180.1
Total Assets	$341.4	$214.6
Book Value Per Share	$ 60.48	$ 33.82
Recent Price of Common Stock	75	30
Price-Earnings Ratio	11.3	11.3
Indicated Dividend for 1958	$ 3.75[2]	$ 1.60
Dividend Yield	5.0%	5.3%

1—Includes adjustments.
2—Includes possible $.25 year-end extra.

New and Basic Activities of Union Tank Car

Although acquisition of the Phoenix and Graver properties at a cost of about $12.6 million in stock was a significant development in the expansion of Union Tank Car, the move provides relatively little diversification. The companies brought into the fold had been engaged since 1948 in supplying practically all the tanks for Union's new car construction.

The transaction promises to produce economies in production and improvements in development of specialized units. Nevertheless, the company is still closely identified with railroad activities and dependent to a large extent on its 57,000 car fleet.

Phoenix Manufacturing enables Union Tank to reach the source of its steel requirements, since the largest Phoenix division is engaged in fabricating steel. A mill was completed only four years ago at Joliet, Ill., for producing a wide range of hot rolled carbon steel products, such as flats, angles and reinforcing bars. As may be readily understood, the comparatively modern facility is highly mechanized and is said to be capable of affording economies in rapid change-overs from one product to another. A flange and forge division produces an extensive line of forged-steel pipe and tank flanges as well as commercial forgings to meet customer specifications.

The Graver subsidiary, which had its inception in 1857, is regarded as one of the major steel plate fabricators in the country with five strategically located plants. The East Chicago, Ind., facility has made virtually all tanks used in Union's tank car production programs in the United States. An Oklahoma plant carries on an integrated operation of manufacturing, selling and servicing products for the petroleum industry. It offers a complete line of processing equipment for use in oil fields. Plans are under way for extending operations of the oil and gas division to overseas markets. Another division is one of the leading concerns engaged in water and liquid conditioning which is believed to possess promising growth potentials.

Union Tank holds about a 90 per cent interest in Refiners Transport & Terminal Corporation engaged in transporting liquid products by motor truck. Like other tank truckers, this concern is showing only a moderate return on the investment, and efforts are being directed toward improvement of conditions.

Investment Summary

Both Gen. American Transport and Union Tank show interesting growth potentials. In the first place, managements are experienced in transportation needs. Secondly, experience has demonstrated that food and chemical companies—or other large users of transport facilities – can achieve economies by leasing instead of owning equipment. Under present tax regulations it is more advantageous to have others own and maintain such facilities as tank cars, since such an arrangement involves payment of charges only when services are required. No funds are tied up by the user of rolling stock and no problem is involved in keeping the equipment in shape.

The decision of Sinclair to dispose of its large tank car fleet to Union is a case in point. The oil company management evidently reached the decision that capital invested in the fleet could be more advantageously employed elsewhere. Charges involved in leases presumably would be less than costs of operating a fleet of tank cars requiring specialized services. The trend toward leasing instead of owning such equipment is expected to gain momentum. As a matter of fact, Union Tank reported acquisition of a large number of cars from chemical companies in the last year.

As specialists in manufacturing and servicing freight cars, both General American and Union Tank undoubtedly are better able to manage fleet activities than any individual industrial concern. They obtain more efficient use of the facilities and are prepared to rehabilitate units which become damaged or outmoded. Both companies have shown competence in enlarging their car fleets. General American has indicated that about $37 million in capital investments will be made this year, principally in tank cars and "Airslide" equipment as well as storage facilities Financing in the amount of $20 million in equipment trust certificates is being undertaken. Union Tank contemplates a substantial reduction this year in capital expenditures to about $10 million from $35.5 million in 1957.

What The Future Holds

Both companies have demonstrated exceptionally fine abilities within their chosen sphere. General American Transportation, which elected to diversify its operations across a number of industries, has shown more than adequate growth over the last decade and stockholders have been particularly well rewarded. On the other hand, Union Tank Car, which stuck to more conservative policies, has grown along with the trend of economic activity, and stockholders have enjoyed earning stability and moderate income growth from their holdings.

The true test of both these policies, however, may well come in the period immediately ahead. As part of a general business slowdown, railroad carloadings have fallen off very sharply in recent months—a factor which seems destined to hurt General American Transportation, with its more diversified car operations, more than Union Tank Car, whose fleets are generally rented on a long-term basis to the major oil companies and their affiliates. Moreover, the slow-down in capital spending and the industrial recession which is upon us may affect General American Transportation's railroad car building operations which comprise a larger portion of its revenues than is true for Union Tank Car. And the general decline in industrial activity is likely to have an adverse effect on General American, since it derives over 51% of its revenues from manufacturing operations.

As the accompanying table shows, manufacturing activities have cut General American's profit margins considerably below the level that might prevail if renting freight cars were their sole operation. On the other hand, Union Tank has maintained consistently high profit margins, affording an ample cushion for earnings in event of a general slide in business.

At current prices there is little to choose from between the two companies on the basis of return on investment. General American at 75 yields just under 5% on its $3.52½ dividend, whereas Union Tank Car at 30⅜ yields somewhat more than 5% on its $1.60 annual pay-out. Both stocks are selling at approximately 11½ times their 1957 earnings. 1958 results will depend largely on the depth of the recession and whether or not business activity turns around. If the boom should be resumed, General American, with its more diversified operations, should continue the upward earnings trend which has been so pronounced in the last few years. Should the bus-

iness recession be a prolonged one, however, some reversal of earnings is probable. For Union Tank Car, on the other hand, a resumption of booming economic activity should be reflected fairly quickly in better operations for its newly acquired manufacturing divisions. On the other hand, a deepening recession should not affect the company's basic operations as widely as General American's will be influenced.

For long-term growth, General American has a proven record. Union Tank Car's record of stability speaks for itself and growth may be stimulated by the new policy of diversification. —END

Electronics Industry

(*Continued from page* 27)

quarter despite the slowdown in general business conditions. Sales rose 6 per cent for the year, and profit margins widened substantially, leading to a 16 per cent advance in net income. Per share earnings climbed to $2.84 compared to $2.46 a year earlier, and fourth quarter results equalled 74¢ a share against 61¢ in the same period of 1956. With electric utility demand for equipment holding up, a further advance in 1958 is possible.

Westinghouse Electric, second largest company in the electrical equipment field, has not developed its electronics lines to the same extent as GE, but has earned a dominant position in the atomic energy field. Nevertheless, electronic devices are growing in importance. The company has an additional stake in electronics through the Westinghouse Broadcasting Co., a growing radio and television network.

The full force of Westinghouse's recovery from the 1955-56 strike came to the fore in 1957, and earnings soared to $4.18 a share from 10¢ the previous year. Backlog is strong, most prices are firm for the company's products and internal efficiencies have been completed, making further earnings growth most likely in the year ahead.

Texas Instruments, which early envisaged the potential of transistors, and went on to become the country's largest producer of these vacuum tube substitutes, completed a successful 1957 and surprisingly made excellent progress in standing off General Electric in the giant's bid for dominance in the sale of transistors. Earnings for 1957 climbed to $1.10 per share compared with 72¢ a year earlier when fewer shares were outstanding. Volume of transistors and other semiconductors was double the 1956 figure, and the company continued to operate as a specialized Geophysical Services organization for the oil industry.

Sales for the first quarter of 1958 are expected to be higher and earnings for the period have already been estimated at approximately 25¢ per share. The picture for the year ahead is brightened considerably by a new long term contract signed with IBM under which the business machine leader will purchase most of its transistor requirements from Texas Instruments.

Minneapolis-Honeywell, on the other hand, suffered its first earnings drop in six years, and may show further slippage in 1958. Company's interests are broadly diversified in most electronic pastures, but recent sales and earnings have been affected by the slowdown in capital spending by industry and the reduced rate of new homebuilding, cutting down the market for its successful heat-control lines.

Defense business accounts for between 25 and 30 per cent of the firm's revenues, but this too has slowed in the wake of cutbacks in aircraft procurement. Its well entrenched position as a military contractor, and its outstanding new product development record should lead to substantial missile business in 1958, but at present it seems doubtful that enough new business can flow from the production lines to offset declines in other areas. Nevertheless, Minneapolis-Honeywell's long range outlook is still good.

Specialized Devices

Closely allied to automation and missile technology is the specialized instrument field. Activity along these lines is widespread, and ranges from relatively simple measuring devices to highly elaborate analytical tools for industry and the medical profession. Instrumentation is a normal part of automation, providing the means for checking the automatic performance of production machinery, but as tools for analysis these devices are just beginning to come into their own.

Beckman Instruments established an early lead as a designer and producer of electronic instruments for scientific and medical laboratory work and has continued in the vanguard, although other companies are making fast inroads in the field. However, Beckman has branched out and now operates through five divisions which turn out a wide variety of electronic equipment including potentiometers, spectrophotometers, computing machines and transistors.

Profit margins were under pressure in the year that ended June 1957, reducing net to 16¢ per share from $1.36 the year before, and although sales should expand in the current fiscal year, the combined impact of heavy research costs, disruptions in defense production and a weakened market for some industrial equipment should prevent any substantial earnings recovery soon.

Nevertheless, Beckman is attempting to reduce its heavy reliance on military business and concentrate its growth efforts along industrial product lines. Thus although the current picture may be trying, the company is building a future hopeful of greater profit potentials. This is a speculative issue.

Consolidated Electrodynamics, another special instrument producer also had profit margin difficulties in 1957 and saw its net fall to 73¢ per share from $1.35 in 1956, despite a 20 per cent increase in sales. The company is a major producer of analytical and measuring instruments, and is a foremost producer of high-vacuum equipment for industry and the military. In addition Consolidated turns out a broad line of special recording devices for use in missiles, automatic processes and other fields.

The principal reason for the company's poorer showing in 1957 was the defense stretchout which hit fourth quarter operations hard, but heavy research outlays, which generally run about 10 per cent of sales, were also a contributing factor.

No let up in sales growth is seen for 1958, but first quarter earnings should continue to reflect disruptions in the defense program. For the full year, however, the absence of extraordinary ex-

penses could lead to a small earnings betterment.

Investment Summary

Electronically operated devices and controls are among the fastest growing segments of modern industry. As production becomes more automatic and as military technology becomes more complex, the call will go out for more refined products to handle and control the new processes. From an earnings and dividend standpoint, however, growth is still in the future for most companies operating in the field. Competition is intense, both from existing companies and from the steady flow of new firms into the field, many of them commanding few resources other than a "shoestring" and a government development or research contract. To maintain their position, therefore, each of the established producers is obliged to expend large sums on research, often gambling their own funds in the hope of gaining a government contract.

So intense has the competition become that a weeding out process has already begun. There are still hundreds of firms in the field, but already only 20 some odd firms account for more than 70 per cent of all electronic equipment production. As these larger companies absorb more of the better newcomers the road will get tougher for the smaller companies. Thus over the next several years a faster merger and absorption pace should develop. Until it is completed and the entire industry is the hands of companies with adequate financial and technical resources, it will remain more a speculative than an investment medium. —END

TV-Radio

(*Continued from page* 31)

undynamic television set market, the near term outlook for all but the most efficient industry members is no brighter than it has been in the past few years. **Radio Corporation of America,** which is engaged in all phases of electronics, and covers the entire radio television field from sets and parts through broadcasting networks, had profit margin difficulties in 1957 and watched its net slip for the second straight year despite an increase in sales. Per share earnings of $2.52 compare with $2.63 in 1956, and some additional decrease of earnings is probable for 1958.

RCA is strong in the military field, but profit margins there are small, and although broadcasting operations are normally profitable, the color video experiment is an extraordinary expense, cutting into earnings. Some improvement may show up in television and radio set sales this year, since dealers' inventories have been worked down to a healthier point, but results will depend in no small measure on the depth of the current recession and consumer spending plans.

Zenith, on the other hand, presents a different picture, and one that runs contrary to the entire industry trend. Sales of radios and phonographs were up sharply last year, but more surprisingly television set shipments were 11 per cent above 1956. In all, sales rose to $160 million from $141 million in 1956 and earnings soared to $16.58 per share from $12.55 in 1956, without taking into account the $10 million out-of-court anti-trust settlement with RCA. Under terms of the agreement, Zenith will receive one million dollars a year for each of the next ten years, and will no longer be excluded from foreign markets. Although reported earnings do not reflect this extra income, the company declared a special $2.00 per share dividend at the end of last year reflecting the settlement. Whether such disbursements will continue in other years is conjectural, but a reasonable expectation.

In addition to its quality radio and television business, Zenith is also the country's leading producer of hearing aids and an important TV tube manufacturer. In light of the excellent market for these products and the company's demonstrated success in outselling its competitors, further sales advances are to be expected in 1958, leading to higher earnings even if profit margins narrow slightly.

One recent disappointment for Zenith was the FCC's decision to postpone scheduled tests of its Phonovision "pay-TV" system, but management places greater long-term emphasis on this development and does not expect current returns from its investment.

Philco began to make some progress along the recovery trail in 1957 after almost two years of disastrously low earnings, but renewed softening in the demand for consumer durables at the present time may set operations back again.

Aside from its position as the leading radio manufacturer and an important television set producer, Philco also makes and sells a wide line of major household appliances, ranging from refrigerators and freezers through automatic washers and driers. Unfortunately, the market for most of these products is as unstable as the television market, a factor which caused earnings to drop to 5¢ per share in 1956 on substantially reduced sales. Improved radio set sales and concentrated management efforts to increase efficiency led to a 5 per cent sales increase in 1957 and an earnings recovery to $1.00 per share.

Brightest spot in Philco's outlook is its growing importance as a defense contractor. Recently a major Navy and Air Force contract for the "Sidewinder" missile was awarded to the company, augmenting the important work it is already doing on the "Terrier", "Tartar" and "Sergeant" missiles. In addition Philco has developed a new acoustic homing torpedo for the Navy and has received a production contract.

With a stepped up research program and chances for more stability in appliance sales, Philco has a good chance to consolidate the gains made this year.

Sylvania Electric scored impressive gains in the unit sales of television sets last year, but higher selling costs and the unsettled conditions in the industry led to sharply narrower profit margins. Despite a doubling in the sale of sets, the company's dollar volume advanced only 3 per cent, while earnings slid sharply to $3.48 per share from $4.11 a year earlier.

Greater market stability should help profit margins in the year ahead and other improvements can be expected from the newly acquired Argus Camera Division. Nevertheless, conditions do not appear ripe for a spirited recovery.

Admiral Corp., much like Philco also derives most of its revenues from the television set and appliance field. Operations in the

last few years have been below par and in 1957 sales fell for the fourth consecutive year, while earnings through the first nine months slipped to 24¢ a share from 76¢ in the same period of 1956.

In 1958, the profit picture should be helped by new efficiency measures taken, including centralized manufacturing facilities, but substantial earnings recovery is still in the future.

Outlook For Telecasters

In contrast to the set manufacturers, the entertainment end of the radio and television business has been flourishing. The exceptional success of old Hollywood films has been as much a boon to television as it has been a detriment to the motion picture exhibitors. But for all the success of the telecasters in the last few years, a few shadows are beginning to cloud their outlook.

For one thing, Hollywood is no longer sure that the release of old films was a wise move, and recently took a firm stand against the freeing of additional post-1948 films. Of greater significance, however, is the "pay-TV" issue which many predict will change the entire structure of the industry. The FCC's decision to postpone decisive tests has given the stations a temporary respite from the anxiety over this issue, but sooner or later it must be tested, and a final policy established.

RCA is the principal broadcasting organization in the country with the largest radio network and the second largest net of television affiliates. Earnings, as previously discussed, however, are dependent on the company's broad interests in many electronic fields.

Columbia Broadcasting, the nation's largest telecaster and second biggest radio network derives the major portion of its revenues from entertainment media, but it also produces phonographs, records and vacuum tubes. For the past few years, CBS has been the most successful of the networks, and earnings have been in a steady upward trend since 1950. Last year earnings climbed to a record $2.90 per share from $2.13 a year earlier, and some advance is anticipated this year. However, slower business conditions may adversely affect advertising revenues, especially if the recession continues through the summer.

American Broadcasting-Paramount has been highly successful in the last two or three years, and has made deep inroads in territories controlled by the two major networks. A beneficial relationship with Walt Disney Productions has been particularly significant in gaining viewers during prime broadcasting hours.

Earnings from television activities have improved steadily, but total growth has been slowed by poor operations of the Paramount Theatre division. Earnings slipped in 1957, reflecting these difficulties, although total revenues improved almost 5 per cent.

There is good profit potential in ABC, but until the theatre division ceases to be a drag on earnings, investment interest will remain speculative. —END

The Iraq-Jordan Federation

(*Continued from page* 23)

machinery and vehicles. Our chief purchase from Iraq, besides oil, are carpet wool and dates. The outlook is for a strengthening of these commercial ties.

Jordan's Economy Unviable

Of the two countries, Jordan is the poorer. It has, therefore, more to gain by federation. Jordan resembles a V-shaped wedge, in area about the size of Maine. The two arms are barren desert, totally lacking in resources. Actually, about four-fifths of Jordan is uninhabitable. The area of cultivation is narrowly limited (about 9%), with meager rainfall reducing crop yields even in regions of good soil. Hence the country is deficient in food production and must import a large part of its requirements. Furthermore, Jordan has neither coal nor oil and, as far as has yet been determined, no workable metal deposits.

Jordan's principal problem is too many people. To its Bedouin population of about half a million in 1949, close to a million Palestinian Arabs were added by the war with Israel and the annexation of some 2,000 square miles on the west bank of the River Jordan. Of these newcomers, roughly half are refugees who have never been absorbed. For the past decade they have been "temporarily" encamped in Jordan subsisting on United Nations dole, and their presence has created serious political instability.

About 90% of the population live in the Jordan River Valley and the adjacent upland areas on either side. The balance, mostly nomadic tribes, are widely scattered. A simple peasant agriculture is the principal activity, with wheat and barley the chief crops. Olives and grapes are grown on the hillsides. The shortage of rainfall and lack of fertilizer forces one-third of the farm land to be left fallow each year.

Although water is available from the Jordan, the river bed is so deeply depressed that costly pumps or dams are required to produce the irrigation needed. The river empties into the Dead Sea, which is an inland lake without outlet, its surface 1,300 feet below sea level.

For years Jordan existed on a British subsidy, but the mounting nationalist sentiment inspired by Egypt brought about severence of these ties and the subsidy was terminated. Since then Jordan has been in a precarious financial position, relying on U. S. loans and United Nations' assistance. For the future, Jordan is looking to its new partner Iraq for a helping hand.

Major structural changes will be required to make Jordan self-supporting. Of first importance is the resettlement of the excess refugee population – and there is the likelihood that Iraq, where there is a shortage of manpower and abundant land, will absorb them. And given the heavy capital outlays necessary for irrigation, food production can be greatly increased. At the same time, non-agricultural resources and light industry can be developed to provide more employment and income for the Jordanians.

The success that neighboring Israel has had in developing desert areas and creating new industries with limited natural resources will undoubtedly act as a spur to the solution of Jordan's problems. As group tensions subside and relations improve, as one day they must, Israel's industrial know-how will be available to help the Jordanians. This is not just an idealistic concept, for

after all the Israelis are of the same Semitic race and prior to World War II they lived together in peace with the Jordanians under the common rule of Britain's mandate. Despite the current antagonisms it would not be the first time that necessity has brought about reconciliation.

Actually, it does not seem unreasonable to believe that in due time tensions will gradually be eased throughout the troubled Middle East and the countries there will be drawn toward cooperation and mutual assistance in matters of common benefit. Those with nature's gift of oil will be able to provide some of the needed investment capital. Israel, with its priceless asset of skilled technicians, engineers, and industrial know-how, will likewise be able to make its contribution once the barriers to closer contact begin to crumble. The important thing is to maintain perspective and to remember that in the view of history the passage of a generation is but the turning of a page. —END

For Profit and Income

(*Continued from page* 35)

should sell materially higher on earnings than the industrial average. Compared with them, for example, chemicals appear overvalued. Thus, four of the latter—Allied Chemical, Dow, Monsanto and Union Carbide—are priced at from 20 to 25 times estimated 1958 earnings, with an average ratio around 22 times.

The Record

In five years through 1957 share earnings of the six drug stocks showed gains ranging from 70% to 231%, with the average 145%, against about 33% for the industrial average and 22% for the four chemicals cited. In 10 years through 1957 profit gains for the six drug companies ranged from 51% to 485% for an average of 260%, against 100% for the industrial average and 54% for the four chemical companies. If you add du Pont to the calculations, you get an average five-year profit gain of 34% and a 10-year gain of 96%. On the record cited, the theory of "dynamic" profit growth in chemicals is somewhat fanciful. For only one of the leaders, du Pont, has it exceeded that of the 30 Dow industrials over the five and ten-year periods.

Selections

Following recent additional gains, the drug group ought to be due for a corrective setback. Based on presently indicated earning power, three of the best to buy on dips are Parke Davis, Pfizer and Warner-Lambert.

Trouble

Oil imports appear bound to be put under mandatory Federal control on a fairly rigid basis, with action perhaps taken even before you read these words. The new deal will be on the adverse side for international companies, and for companies which have put a lot of money into new refineries planned to use economical foreign crude oil. It will benefit the average domestic oil company to some extent, and particularly the crude producers on a long-run basis. However, what the whole industry needs right now, and is not likely to get any time soon, is a better supply-demand balance. Product supply remains heavy, demand disappointing. It is possible that the stocks, or at least the domestic group, have put their lows behind, but we would not take that for granted at this stage.

Management Holdings

Some investors prefer stocks in which officers and directors have large holdings, thus putting insiders and outsiders "in the same boat." Actually other considerations are always more important. Among companies with large management holdings, the stocks run the gamut from good to fair to inferior. The same is true of stocks of companies with essentially professional (non-family) management. But if you lean to stocks in which management has a major position, here are a few of the Best: Campbell Soup, Diamond Alkali, Firestone Tire, Food Fair Stores, General Finance, General Portland Cement, W. T. Grant, H. J. Heinz, Household Finance, Johnson & Johnson, Kresge, McGraw-Hill, Mead Johnson, Motorola, Pet Milk, Timken Roller Bearing and Winn-Dixie Stores. None of those cited is any bargain at present prices. —END

Political "Pap"—Market Factor

(*Continued from page* 7)

promising long-run substitute.

We hope we are right in thinking that Government action will fall short of forcing a new inflationary boom. We think so because (1) our key national leaders, including those in Congress, are not irresponsible fools; and because (2) with industry over-built for some time to come and consumers generally pretty well bought up in durable goods, generation of a new boom by Government action probably would be a far more formidable undertaking — requiring really mammoth, and frightening, deficit spending — than many imagine.

But if we are right, the outlook for business and corporate earnings will remain poor-to-drab for at least a good many months to come. That could be largely ignored if the market were at a really deflated level. On the contrary, it is at a medium-high level. Relative to earnings, stocks are not much less overvalued than they were at last July's top; and on the ratio of dividend yields to bond yields, valuations are mostly adequate and far above anything like a bargain basis. Investment conservatism and realistic discrimination in decisions on portfolio management remain in order.
—Monday, March 24.

Answers to Inquiries

(*Continued from page* 44)

on a 12-months basis.

Capital expenditures during 1957 were $2,821,968, including sums for addition to the glass laboratory at Southbridge, an assembly line for sunglass production at Chelsea and completion of installations at the new plant in Frederick, Maryland, as well as for normal replacements, improvements and expansion of manufacturing facilities.

The company made important steps in 1957 to complete the managerial reorganization begun in 1956. The full effects of these efforts to strengthen and rationalize operations are still to be realized, the company says. —END